

THE SCHOOL JOURNAL.

NEW YORK AND CHICAGO.

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FEBRUARY 20, 1886.

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The School Journal.

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THE SCHOOL JOURNAL.

A WEEKLY JOURNAL OF EDUCATION.

AMOS M. KELLOGG,
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FRANCIS W. PARKER, } Editors.

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CONTENTS.

EDITORIAL.

| | |
|---------------------------------------------------|---------|
| Saloon Associations—Attend to the Little Fellows— | |
| Subjugation—The Language of Dress—The Good Time | |
| Coming—The Man of no Opinion..... | 115 |
| Knowing and Teaching..... | 116 |
| National Aid to Education..... | 116 |
| Correspondence..... | 116 |
| The Regents' Examination Questions—Straight Uni- | |
| versity—Supt. Sanford—"The Citizen"—Horatio Sey- | |
| mour—The National Summer School of Methods—A | |
| Good Catalogue of Books—A Trip in the Rockies— | |
| "Shoot Low"..... | 116-117 |

THE SCHOOL-ROOM.

| | |
|------------------------------------------------------|-----|
| Representative and Representative Powers. By Col. F. | |
| W. Parker..... | 117 |
| One of the Cardinal Virtues. By E. C. Gardner..... | 118 |
| No Recem. By A. A. Ashman..... | 118 |
| A Lesson in Domestic Economy..... | 119 |
| A Lesson on Space, Distance, and Sun. By S. H. | |
| Hopkins..... | 119 |
| A Primary Lesson in Physics..... | 119 |
| School-Room Ornamentation..... | 119 |
| The Relief Model..... | 119 |

TABLE TALK

| | |
|---------------|-----|
| Mistakes..... | 120 |
|---------------|-----|

READING CIRCLES

| | |
|---------------------------------|-----|
| The Indiana Reading Circle..... | 120 |
|---------------------------------|-----|

GENERAL EXERCISES

| | |
|------------------------------|-----|
| An Observation Exercise..... | 120 |
| An Illustrated Story..... | 121 |
| Inventors' Day..... | 121 |
| The Things of To-Day..... | 121 |

EDUCATIONAL NOTES.

| | |
|-----------------------------------------------------|-----|
| Personals..... | 122 |
| New York City..... | 122 |
| Extracts from Addresses Delivered at the Ithaca As- | |
| sociation..... | 123 |

LETTERS.

| | |
|----------------|-----|
| Answers..... | 123 |
| Questions..... | 123 |

BOOK DEPARTMENT.

| | |
|---------------------|---------|
| New Books..... | 124-125 |
| Literary Notes..... | 124 |
| Books Received..... | 124 |

The articles in the JOURNAL are with few exceptions, all original. We could fill our pages with excellent material from books and other papers, but we prefer to give our readers the things of to-day, discussed by live thinkers. In this way we keep a record of the thoughts of the times.

We call attention to the articles of Mr. Gardner and Mr. Ashman. Both are well worth reading. Mr. Gardner is well known in literature as the author of the book "The House that Gill Built." The next JOURNAL will contain an article in favor of Recess by Mr. L. H. White.

THERE is a good deal more in a barrel of ale than at first appears. We are told that out of one hundred and forty-four quarts, one hundred and thirty are harmless water, three and a-half gum, two malt sugar, one albumen, and seven and a-half alcohol. This in itself seems not a very bad showing. But is it all? How shall we value wasted hours, unseemly talk, unnecessary expense, work neglected, and temptations encountered? It is the saloon with its associations that tells on the morals of the young. Alcohol is bad enough, but there is something worse. It is found not behind the bar of the saloon but in front of it.

A man may drink his liquor, go to bed, and wake up sober; on the other hand, he may drink his liquor, go into company, and come to his senses in prison. A young man says: "It doesn't hurt me to drink." Well, it does hurt you; what comes of it, hurts you. There can be no difference of opinion here.

A GOOD lesson can be learned from an incident that occurred during the last war. A veteran says: "It was down in Virginia. I was placed on guard over a barn, and was taking it easy when a lieutenant came along, probably to see what his guard was doing. I ought to have saluted him, but I didn't. Soon I saw a large, nice-looking man coming toward me. He wore a nice uniform, and I noticed as he approached that he wore a lieutenant's straps. I wasn't going to pay any further attention to him, but when he came quite near to me I saw that there were two stars inside those straps. I jumped up and presented arms as quickly as I could, for I saw that it was Major-General Hancock. 'Never mind that for me,' said he, with a wave of his hand. 'I don't care anything about it, but always do it for the little fellows.' He passed on. There was irony and a lesson in that answer. The 'little fellows!' Gen. Garfield once said: 'I feel a profounder reverence for a boy than a man, for I know not what possibilities are buttoned up under his shabby coat.' No subjects need a more thorough consideration than the reverence due childhood and the possibilities of youth. What may not that boy who sits on the lowest seat in the humble district school become? At no time in the history of the world is it possible for him to become so influential; whether for good or evil depends upon what sort of training he receives, perhaps in that very school this very winter. It is quite possible.

THE primitive meaning of subjugate is to pass under the yoke. The word crystalizes a historical fact. The subjugated are slaves. No one who is thus conquered can be his own master. The yoke is thus a symbol of submission and toil. It is well to bear the yoke, not like the ox or as a slave, but to subjugate ourselves to ourselves; to make the impulses obey the law of reason. There is not a force in human nature that may not be made to do good service if conquered. Even the baser elements can serve the higher. The difficulty with most of us is, we never learn how to use ourselves. We are in part either untamed savages, or uneducated idiots. The very things we ought not to do, we do, and the things we should do, we do not do. To subjugate ourselves is a very necessary part of decent living. "I couldn't help it," has ruined millions. An armed rebellion in a state never can work half the damage to a country as dictatorial passions running riot in the human commonwealth, to a person. Conquer self! Let a teacher bring untamed passions in the school-room and government is impossible. A tribe of savages would do less damage.

A man is known by the company he keeps, and a woman by the clothes she wears. An old book of 1684 says, "The saints are known by their suits."

There is more than a grain of truth in these statements. A slovenly, untidy woman cannot be a very good woman. The mind shows itself by the way clothes are put on. A feather in the hat of a young woman may mark her as a dowdy. The way she matches colors in her articles of dress tells to all she meets the quality of beauty she possesses. A man's clothes at present mean nothing. The rich old vivid costumes of the last century have gone, and the dark or browned sad colors are emblems of nothing but cold meaningless observances. No man can be judged by what he puts on; a woman can. The modern man aims to cover up all clew to what he really is. The modern woman cannot. She is an open book whenever she appears before the world. Women are read easier than men at all times, and by their dress they greatly facilitate the insight.

Teachers are object-lessons always, women-teachers especially so. Grace, beauty, politeness, neatness, order, and method are taught by one whose colors harmonize, whose clothes fit, and whose motions are graceful. Even morality finds an adjunct in womanly apparel when properly made.

DURING the last fifty years the world has grown smaller, and yet larger—smaller because it takes less time to circumnavigate it—larger, because more of it is known to civilization. The whole earth is a vast whispering gallery. The riot in London was known in America the same afternoon it took place. Nothing can be done in a corner. The criminal is safe no where. The wise man's acts precede him, for the speech delivered in the afternoon in Parliament is read in the morning of the same day in San Francisco. Nations are neighborly, distant cities on familiar speaking terms, and far-separated business houses in close commercial relations. There is no more sea. It is a stream crossed in a palace. Comforts multiply. The poor live better than kings in the middle ages. Human life is lengthening. Greater things are yet to come. The end is far distant. Speed will be increased; steam give way to electricity, printing cheapened, labor lessened, and luxuries common, food nominal in price and abundant, and all sorts of useful appliances so common and so easy to get that no one need be without a large number of them. Education will be understood. The "graded-school" will give way to sensible classification, and the child will be studied and taught by those who will have made his nature and nurture a subject of careful and systematic investigation. The school will be adapted to the boy, and not the boy cramped or stretched into the school. The number of facts a teacher or his pupil knows will be a matter of minor consequence. What the child is, what he can do, his adaptations, and capacity, will be investigated. The teacher will be known by his pupils as the workman by his chips, and not by his records or examinations. The good time's coming. Labor, wait.

Concerning the men of no opinions, Edward Everett Hale recently said very forcibly: "How often, alas! one meets a man who never knew the luxury of an opinion. He has taken his morning impression from one newspaper, his evening impression from another. Meanwhile, he has been the tool and the fool of every person who chose to use him, or to tell him what to think and what to say. To keep clear of that vacancy of life, a true man cares diligently, lovingly, for the weapons which have been given him, weapons of defense, yes,—and sometimes weapons of attack, if need may be. He learns how to reason, how to search for truth, how to question nature, how to interpret her answers. He learns how to arrange in right order such eternal truths and such visible facts as relate to the matter he has in hand. He clears and enlarges his power of reasoning."

KNOWING AND TEACHING.

It is one thing to know, and quite another to know how to use it to cause others to know. Visiting the class-room of a man who was a celebrated student and writer, it was plain to teacher and visitor the pupils were uninterested. "Sit up, John, and give attention," "Come, come, William, put away that knife and give attention," "There, Robert, you have played with pieces of paper long enough," were too frequently heard to be pleasant. Why is it that such an able man is so unable to interest his boys? was the riddle that puzzled the visitor; he was evidently crammed with the most interesting materials.

That was a good many years ago. That teacher abandoned his school, and buying a house in a village of cultivated people, makes it a business to receive into it a dozen young women graduates who read and talk with him. They do not need education but instruction, and for this he is well fitted. He has chosen wisely. He knew too much to teach well; or rather, he constantly mistook instruction for education.

Now it can scarcely be said that the teachers of our schools know too much. As a rule they know far too little; their resources are most meager. Yet the same mistake is made. They have learned certain things out of certain text-books; they conceive their duty as teachers to be to require their pupils to learn these things. They proceed to have them learn them; and let them look around in ten years' time to see what has become of those pupils. Do they seem to have been educated?

In fact, while in school the teacher sees that some thing is wrong. Here is Henry, full to the brim of grammar, can cite rule, note, and exception, and pick flaws in Pope, Irving, or Howells, and yet a fellow living in accordance with no rule at all;—spitting on the floor; with unclean clothes and hands always saying "Hey" instead of "Sir."

Teaching has its end in character—the power to act in accordance with fixed principles; instruction has another and inferior end—the possession of knowledge. The man who aims at the latter rarely educates; he may, because there resides an educative principle in the mind that asserts itself in spite of neglect. Let it be noted that the one who aims at education will always arouse in the pupil the desire for knowledge, and at the end more valuable knowledge will be attained than if instruction alone be aimed at.

The teacher must be the possessor of knowledge, and that in generous quantity; he cannot teach largely without it. But the object of possessing knowledge in his case is to give him *teaching power*. It is not that he may seize his willing or unwilling pupil, and pour into him the knowledge he has gained. He must know to teach; not know and teach.

NATIONAL AID TO EDUCATION.

Senator Morgan recently delivered a speech in Congress against the government aid to education. He thinks it will elaborate the machinery of government, create fat places for a few, and tax honest, hard working men in order to educate drunken, loafing vagabonds who will not work for themselves. He says that "if, from our sixty millions, were deducted all the 'dead-heads, dead-beats, and non-producers,' there would be about twenty millions who would pay the taxes to carry out its provisions. The bill itself would be equivalent to a tax of \$3 per capita on those taxpayers, and by the time all the officers were appointed for the administration of this scheme of benevolence and all the clerks appointed that would be necessary to investigate the accounts of the thirty-eight states and territories affected by the bill it would be found that the tax per capita would be \$10 instead of \$3."

This is the view of an enemy of the measure. Taxes for education are cheap at any price. If the taxpayers wish to lose their money, they cannot more effectually do it than by encouraging ignorance. Where are "dead-heads," "dead-beats," and "non-producers" manufactured? Not in school-rooms. Shut up school-houses, let children grow up in ignorance, and how much will dead-beatism and dead-headism be decreased? Ignorance is a mushroom with roots of iron. It springs up with amazing rapidity, and sticks with cast-iron tenacity. Its seeds spread on the wings of the wind. It must be obliterated or it will obliterate us. Suppose there is a pestilential taint in a house. Let it stand and a whole city will be infected. Destroy it and the city will be safe. Would the cost of the house be estimated? The unani-

mous voice of the people would be: "Destroy its every board and brick," and *it would be destroyed*. Self-preservation is the first law of nature. Education is not only the cheap safeguard of nations, but their *only* safeguard.

We want national aid to education, but what we bargain for we must get. If a child asks for bread should we give him a stone? If we get an appropriation for education we shall not put up with its "graded," text-book-burdened routine, and machine ruled substitute. To the average mind a national system of education means one course of study, one set of text-books, regular cast-iron examinations, records to needle-point minuteness, per cent. grading and reporting, and the hackneyed "recitation" of the stock branches in the stock manner. It means memory cramming, book learning, and regulation supervision. It means an army of well-paid superintending officers who shall sit in solemn council over piles of reports, wrung out of tired, half-paid, overworked teachers, who are compelled to make so many records that recreation becomes an impossibility, and good health and cheerfulness a thing of memory. We shall oppose the setting up of this great Molock, into whose heated arms uneducated infants shall be cast. We have enough of this sort already. No money for this, if you please, Senators and Representatives in Congress. Let us have ignorance, rather. But millions for schools that shall teach children how to use the senses God has given them. Schools in which a fact is not a fetish, but where it is considered more praiseworthy to dovetail wood, polish iron, pound brass, mould in clay, cast in iron, design on paper, and color in an artistic manner, than to recite the genealogical record of all the rascals who have disgraced the English throne, or the dates of a thousand unimportant events that have occurred in the early settlement of our land. Schools where *real* geography, *real* history, *real* arithmetic, and *real* science will be taught, and not where their skeletons are set up. We want religious schools, where downright, upright, honest, outspoken religion is taught, not where its emasculated counterfeit is crammed down the throats of pupils, but where the old-fashioned doctrines of the Bible are lived out and up to. There isn't an honest infidel in this land that doesn't respect the principles and practices of the New Testament. We want these in every school under government control. The morality of a government school must stand on something more than sentiment. Government aid that will make schools capable of educating the people into the ability of thinking out the problems of life and acting in accordance with the laws of God we are in favor of. Schools that will not do this we are opposed to. Here we stand.

CORRESPONDENCE.

The busy and thrifty town of New Britain, Connecticut, contains no more tasteful and conspicuous building than the State Normal School, which from its lodgement half way up the face of a steep hill, overlooks the town and surrounding country. Graduation Day, in spite of a severe storm, called together there from far and near as many as could be comfortably accommodated. While the brief and altogether appropriate exercises in the hall in the afternoon called forth the encomiums of the daily press; for the reader of the JOURNAL, or the practical school-man, the forenoon of this field-day furnished a still richer treat. This was given to class exercises in the four model school-rooms. The skillfully arranged program made possible and easy the object of anyone who had come to observe the work in any particular branch. By going from one room to another at the intermissions one could see from two to six exercises in each study by different teachers. Space would not allow a description of the recitations. No feature was, perhaps, more noticeable than the power shown by each pupil-teacher of teaching, not merely one, but every subject, well. This was well illustrated by the exercises in Phonics, one teacher after another conducting the classes without confusion or much variance of success. In the tower of the building a large and well equipped laboratory attracts the attention of all visitors. Here Prof. A. B. Morrill not only instructs the young teachers in the use of chemicals and the construction of apparatus for the illustration of the principles of elementary science, but also gathers classes of children from the model school to teach them by experiment and explanation the rudiments of the same subjects. In fact, this is the work to which Prof. Morrill is especially devoted, as he is thereby working out his idea of the practicability of teaching in the common schools, and to even the youngest pupils, these elements of practical science.

The wide scope of this normal school, which in point

of numbers stands second in New England, is realized when the fact is made known that it has under its direct control, so far as the actual teaching is concerned, six schools of practice outside of New Britain in the adjoining towns of Newington, Farmington, Bristol, and Plainville. These schools range in grade from the primary to the high; the normal supplies the regular teachers to a great extent, and sends out the pupils of the normal as assistants, giving each several weeks of experience during the last year of school. The regular teachers make weekly reports of these assistants sent to them; and they are moreover, visited, advised, and encouraged by the principal once a week. This plan has been so fully satisfactory that it will be extended as rapidly as possible. principal Carroll appreciates the close and cordial relation which should exist between such an institution and the common schools of the state. He is a man of indefatigable activity, generously responding to the many demands made upon his time and personal efforts from all over the state. Visitors find generous hospitality when they turn their steps toward the normal school, a ready welcome, and all means placed at their disposal for seeing the work which is done. The influence of the school is now very strong, and spreading and increasing as graduates go here and there to occupy positions where a demand for good teaching has sprung up. Of the sixty-eight persons who have graduated previously to the class of this month, sixty-three are following the profession. Of the graduating class, numbering nineteen, eight are already employed, and half of the remainder have engagements open to them. As a fact, the supply has not equalled the demand for such teachers as now are trained at the normal school. Last year there were 260 in attendance at the school; and the size of the classes graduating shows how strictly the standard of acquirement is adhered to, and how little fear there is of any deterioration in the work of training those to whom in a few years the welfare of the great mass of rural schools must be committed. Has Connecticut not good cause for satisfaction, not to say pride? F.

THERE is one man among the thousand other thinking men and women in the State of New York who has sound ideas on educational subjects. His name is SOLOMON SIAS, *Schoharie*. He does his own thinking, and is not afraid of expression. His column in the *Schoharie Republican* is full of good things. In fact, we hazard nothing in saying that it is the most ably edited column in a political weekly paper in the country. The pages of the JOURNAL have been frequently enriched with articles from him in the past as we hope they will be in the future. May his hand long write.

In the issue of the JOURNAL for January 30, 1886, we commented upon the recommendation of the Governor in his annual message to abolish the Board of Regents, and place their work under the charge of the Superintendent of Public Instruction. The statement was made that the questions for the Regents' examinations are prepared by a clerk, conveying the impression that the preparation of these questions is entrusted to some young, inexperienced, irresponsible person as a matter of slight importance. On the contrary they are prepared by the most skilled and experienced man in the office. The preparation of judicious examination questions for any school or class of persons is a difficult task, and requires ability and experience of a peculiar kind; but this difficulty is greatly enhanced when the questions are to be used in nearly three hundred schools, in which a great variety of text books is used in every branch of study, and a still greater diversity of methods is employed in giving instruction in these branches. The Regents regard this as one of the most important interests entrusted to their care, and aim to secure persons for this duty who have special qualifications for the work. The questions are prepared by those who have had long and successful experience in teaching in the secondary schools, and are familiar with the work and the requirements of those schools. The questions, when prepared, are subjected, in proof, to thorough and unsparing criticism by competent persons. A great effort is made to render the questions excellent and well adapted to the uses for which they are intended. The facts which have been brought to our attention are gladly given a place in our columns.

THE promotion and confirmation of the welfare, happiness, and health of the human race are far more simple than we think. All the means are easy and near us, but we do not perceive them; we see them, indeed, but we do not consider them. We seek help from afar, while we alone can help ourselves.—FRANKEL.

STRAIGHT UNIVERSITY, New Orleans, La., is supported by the American Missionary Association for the education of the colored people of Louisiana and adjoining states. The long and successful experience of its president, R. C. Hitchcock, as a teacher in Massachusetts and Connecticut, and his tact, good judgment, and efficiency well qualify him for the various responsibilities of this position. Under his wise administration, this institution is rapidly growing in attendance, popularity, and influence, and is far in advance of any other similar seminary in this part of the South. The Stone Hall erected in 1891 by the munificent gift of the late Mrs. V. G. Stone, of Massachusetts, and the Whittin Hall, are full to overflowing. The chief embarrassment now is the limit of school accommodations. Every school and recitation-room is so crowded that many have been turned away who begged for admittance. An additional building is an urgent necessity.

The best men in the South—those of highest culture and influence—appreciate the necessity and value of such institutions as Straight University to educate men who shall be qualified to be leaders in elevating the colored race. On several occasions I have heard Major E. A. Burke, the former director of the Exposition, a fair representative of the best sentiment in this city, utter opinions which I will here epitomize as fitted to correct misapprehensions still common in the North: "The hope of the colored man of the South lies in education, especially in the agricultural and mechanical college, and in the school for technical education. In that great temple of industry, the Exposition of last year, the grand exhibit made by the colored people has not only inspired them to nobler efforts, but it has taught the white people of the South the value of this great auxiliary element that is in their midst, and it has shown them how to work out the problem of Southern progress in the future. Great strides have been made by the colored race during the last few years, and now their advancement goes hand in hand with the advancement and prosperity of the whole Southern country." Similar sentiments I have heard from prominent Southerners in Georgia, Florida, Tennessee, and other Southern states. The triumph of the prohibitionists in Georgia is attributed, in part at least, to the influence of the American Missionary Association, and especially to that of Atlanta University, which has trained up so many to be the trusted leaders of the colored people in that state. Hon. G. J. Orr, the state school commissioner, expressed to me when in Georgia his very high appreciation of the excellence and broad and growing influence of the Atlanta University. Dr. Mitchell, one of the editors of the *Times-Democrat*, followed one of my lectures at the Straight University with a short address in commendation of the excellent work and influence of that institution. B. G. NORTHROP.

New Orleans.
Supt. HENRY R. SANFORD, of this state, is not a candidate for the office of superintendent of public instruction. Many friends urged his canvass, but he prefers to stick to his chosen work of institute conductor in which he has succeeded so well. Mr. Sanford never authorized the use of his name in connection with the office, and has assiduously tried to contradict the statement that he is in the field. He has recently removed his residence from Middletown to Syracuse. Institutes will commence *solid* about the middle of March.

MR. GEORGE R. CATHCART, of the firm of Iverson, Blakeman, Taylor, & Co., will sail about the 15th of March for Europe in the *Etruria*, of the Cunard Line. After a close confinement to business for many years, we are pleased to learn that he has decided to take this needed vacation for recreation and pleasure. We join his numerous friends in wishing him a pleasant voyage and a safe return home again.

A NEW publication is at hand this week, called "The Citizen," published by D. C. Heath & Company, Boston. It is under the editorial care of Henry Randall Waite, Ph. D., and the organ of the American Institute of Civics, its motto being "Good Government Through Good Citizenship." It is a two-column paper, a little smaller than the *JOURNAL*, of twenty-four pages, including those devoted to advertising. Its aim is to urge the study of the essential principles of good government, both in school and out of it. It is excellently printed, well edited, and has a most worthy object in view.

THE only just way to examine pupils is to find out what the teacher has taught, and her manner and method of teaching.—COL. PARKER.

HORATIO SEYMOUR was no ordinary man. Throughout his whole public life he was exceedingly popular. He will always be remembered as one of the great Governors of the Empire State. Although a politician, he was an accomplished statesman, and honest. His memory will be cherished by former residents of New York in all parts of the country, without regard to political affinities. His mistakes have long ago been forgiven and forgotten.

THE National Summer School of Methods has secured twenty instructors for the different courses to be given next summer. Although various parts of the country are represented on its faculty, we notice New York furnishes a larger number than any other state. Some of our best instructors have been selected, as will be seen by the following list:

Prof. E. H. Cook, Principal of the Potsdam Normal School, one of the finest speakers on educational subjects in the country; and Prof. Chas. W. Cole, Superintendent of Schools in Albany, who has done so much for the advancement of education in our state capital, are to give a series of valuable lectures on the general subject of school management.

A practical and fully equipped Kindergarten will be opened, with a class of children, by Miss Mary L. Van Wagenen, of this city. Mrs. Sara F. Fletcher will direct the Training School department, helped in her work by an able corps of assistants.

Miss M. S. Cooper, so long connected with the Oswego Normal School, will give a week of her original and valuable talks on Language. No teacher can listen to these lessons and not be greatly benefited for her work. Prof. J. Barhite, a very successful teacher, at the head of a large grammar school in Saratoga, will give some practical lessons with pupils from his own school, on the subject of Arithmetic. Students from other states attending the school will thus have an opportunity to learn of the improved methods of instruction now in use in New York.

A GOOD catalogue of books for the young is a most desirable possession. Concerning the list prepared by Mr. Dwight Holbrook of Conn., the *Examiner*, of this city, recently said:

"Our readers have often written begging us that we would compile a list of books suitable for young people's reading. Other duties have so filled our time that it has never seemed possible for us to do this, useful as we knew such a list would be. But Messrs. E. L. Kellogg & Co., of this city, the well-known educational publishers, have had such a list prepared, the compiler being an accomplished teacher of Connecticut. He has done his work thoroughly well, giving not only a classified and priced catalogue, but prefixing to it some helpful general suggestions and a brief account of each book in the list. The pamphlet will be mailed to any one who sends to the publishers a two-cent stamp.

"With this guide no parent or teacher need be at a loss for good books to put in his child's hand. And he may have absolute confidence in the list. While we should have omitted some names that it contains and inserted others, there is not a book of bad moral or literary quality in the entire catalogue."

In answer to many inquiries in reference to a visit to the Rocky Mountains the coming summer, we would say that there will not, for many years, be a better opportunity for teachers to visit Denver, Pike's Peak, the Garden of the Gods, and Salt Lake City, than during the coming summer, in connection with the meeting of the National Association at Topeka. Fares will be exceedingly low, and there will be great advantages, social by no means the least, in going in company with a large number. Such a party, it is expected, will start from New York and Albany for Chicago in a Pullman coach, and keep together until they return. The cars they take can be engaged for the round trip if desired. Suppose the company reaches Chicago in time to spend Sunday. They can leave on Monday at 12:30 P.M. over the C. B. and Q. road, and reach Quincy, at 10:50 the same evening. Over the H. and St. J. road, they will reach Kansas City at 9, the next morning, and Topeka a little after noon. Here the remainder of the week would be spent, leaving in time to reach Denver in the evening of the next Monday. Until late the following Thursday, many places of interest would be visited around this wonderful city. Chicago would be reached at 3 P.M. on Saturday, and New York or Albany as soon as the party might determine. This is a suggestion. The cost of this extensive journey will be small considering the number of miles traveled, and the objects of world-wide interest seen. Few realize that it is 534 miles from Chicago to Topeka, and 652 miles from Kansas City to Denver. It

is quite a journey from New York to Chicago. When Denver is reached, parties will be doubtless organized to visit Yellowstone Park and Salt Lake City. We shall be glad to give our readers all the information concerning this trip within our power. It would be a far more sensible excursion than a journey to England, and far less expensive.

WE, as teachers, can learn something from the boot-black. We are apt not to get down to the level of those with whom we have to do. "How did you get such an excellent shine?" we inquired of a boot-black that had been pursuing his vocation upon our soiled boots, so that they were almost like mirrors. "Why, boss," he said, "I just got *right down* to it."

And then we recalled his position. Kneeling upon his carpet-cushion, thus literally "getting down" to his work.

More than that did we notice, for, to make the highest polish appear, he bent even lower than usual and *breathed* upon his work, subsequently plying his brush vigorously, and thus producing perfect work.

"Shoot low," said the wise and tactful general. And this is good advice to teachers, and when we do this in the spirit of faithful labor manifested by the boot-black, we shall be equally certain to secure that polish of the mind which will literally reflect credit upon us and our teacher-work. CHARLES JACOBUS.

THE SCHOOL-ROOM.

PRESENTATIVE AND REPRESENTATIVE POWERS.

By COL. FRANCIS W. PARKER.

Presentative power conditions the presence of an object.

Representative power acts by means of words, oral and written, presented to the senses; this same power acts without the presence of either objects or words.

In seeing, hearing, and touching, the principal acts of the mind are acts of representative power.

Every act of presentative power is an act of recollection or remembrance.

All "concepts of absent objects" come into consciousness from the unconscious, or from memory (retention).

The unconscious and memory (retention) are synonymous.

There can be no conscious act of the mind without an act or acts of representative power.

What, then, is the difference between the presentative powers and the representative powers?

Is the difference to be found in *means* of recollection?

Is an act of presentative power a *means* of the action of the representative power?

A NEW QUESTION.

How came these concepts of form, color, sound, etc., in the unconscious?

These concepts consist of related elementary ideas?

Are elementary ideas inborn, or do they come into the mind from external objects?

A blind person—born blind, can never think color—can never use color in thought as a part of a concept; a person born perfectly deaf can never think sound, or in other words, can never use sound in thought as a part of a concept; a person color blind, who gets from the color red an elementary idea of gray, can never think the color red. These facts tend to establish the inference that such ideas are not inborn; if they are not inborn they must be caused by the contact of external objects with the mind through the nerves.

Something must come into the mind over the nerves from the outside world. The things that come into the mind over the nerves are properly called *sensations*. Sensation is often ambiguously used for feeling. Can a sensation—or the *something* that comes into the mind over the nerves, be *felt*? Can the mind be conscious of sensations? Is the power of the mind to receive sensations the presentative power? If the mind is not conscious of sensations—it is conscious of one result of sensation, i. e., recollection—or an act of representative power.

REFLECTIVE POWER.

We can be conscious of no thought without being conscious of an act of judgment; for instance, a dog is (presentative power?). A concept of a dog is recalled (representative power), consciousness of thoughts like these,—"There is a dog," "The dog is black," "The dog runs," acts of reflective power.

What is the difference between an act of representative power and an act of reflective power?

The thought, "The dog is black," is an abstraction; it is also a judgment.

Can there be an act of representative power without an act of abstraction and judgment?

What are the absolute conditions of every act of comparison?

INTUITIVE POWER.

We know by this power "certain fundamental things without being taught."

Does "without being taught," mean without learning?

Can we know that "a part cannot equal the whole?" before we have a concept of a whole?

We have a concept of a horse, for instance, we think "the horse is black." "Its leg is a part of its whole form." "Its leg is not equal to its whole form." Is the first sentence a product of reflective power, and the third a product of intuitive power? What is the difference in kind of power?

A thorough comprehension of these so-called four powers would leave very little to be learned in psychology.

The members of the New York Reading Circle are now studying Sully's Psychology and Parker's Talks on Teaching. More teachers are studying the mind than ever before in the history of this country. This is a most encouraging sign.

ONE OF THE CARDINAL VIRTUES.

BY E. C. GARDNER, Newton, Mass.

Author of "The House that Jill Built," and other Architectural Works.

This was what the doctor said: "Keep your boy out of doors all the time from sunrise to sunset. Let him roam in the woods and dig in the dirt till his lungs grow strong, his muscles firm, and his appetite big."

"But he ought to be in school. He is quite old enough and we cannot bear to have him grow up in ignorance."

"Yes, I know all that, but his body has the first claim; before he begins to store up wisdom he must have a vessel strong enough to hold it. Besides with his surroundings he may safely be left a year or two longer to learn what he needs to know by *unconscious absorption*."

If parents and teachers, school committees and superintendents only knew how much children, from the very earliest dawn of understanding, absorb and retain, and if they would always act wisely upon that knowledge, it would almost seem that we might dispense with the greater part of the common machinery of education. The truth is that these little ones can no more help receiving knowledge, sentiments, and impressions from what they see and hear around them, thus laying the permanent foundations of character, than trees planted in fertile soil can help appropriating from the atmosphere the necessary materials for their natural growth. This is a subject, the value and effect of environment in education, that might be expanded into about sixteen royal octavo volumes, but I only wish to refer at present to a single item of one of its separate branches.

"It ought to go without saying that a school-house which is a thing of beauty as well as of use, and which is supplied with all that makes for the comfort and well-being of teachers and pupils, will have a beneficent and lasting influence upon all who are connected with it. But school-houses, beautiful and fully equipped, do not seem to be available everywhere, although I hope to be able to show, by and by, that they are not so far away as is commonly supposed. There is, however, one quality that always belongs to the highest and the best, and which no school-house in the country need ever be without, a quality that was held in great esteem in apostolic times and has not yet lost its rank. We cannot all be great, but we can all be good. Likewise, it may be out of the question for us to be grand; it is certain that we can be clean, and cleanliness is next to godliness. How true it is that the most precious, potent, and valuable things in the world are the most easily obtained!"

"'Tis heaven, alone, may be had for the asking."

There is not one of the humblest of the remote and antiquated country school-houses that still stand, silent reproaches to the boasts of "modern civilization," nor a far away structure in the log cabin regions of the pioneers which in this, the most excellent of all the material, visible virtues, may not stand proudly on a par with the highest of the high schools in the richest and most lavish communities. And cleanliness is a thousand times better than grandeur, for there is no estimating the value of the discipline, intellectual and moral, that will result from spending a few hours every day amid surroundings—no matter how simple—and in an atmosphere, of absolute cleanliness. It is just as im-

possible that what the doctor would call an "absorbent" child should be subject to this influence and not derive sure and positive strength from it, as it is that a water lily can refrain from opening its white and gleaming petals when it has risen to the life and light of the pure, fresh air and sunlight.

Cleanliness in the school-room is always possible. Nay, more; the lack of it is inexcusable. There are no claims of regular "recitations," formal discipline, or even of that chief of all good habits, punctuality, that should not be made to stand aside for cleanliness, if need be. Cleanliness should pervade every part of the premises, starting with the walk at the front gate, rising through all the halls and stairways, enhancing the dignity of the teacher's desk, shining upon those of the pupils, looking out through the windows, and permeating every rod of the playground even to the remotest corners of the out-buildings. Is it not true that the benign influence of such a spirit of cleanliness would be beyond all computation, and that it ought to be obtained at any cost?

And this, I say, is within the reach of every school in the country, only, unfortunately, the price that has to be paid for it in many old houses and not a few new ones, is most disastrously high; for this virtue is a sensitive plant, extremely susceptible to its surroundings. When they are favorable it thrives apace and brings forth fruit in abundance, when they are unfavorable its growth can only be promoted by constant care and labor.

NO RECESS.

BY A. A. ASHMAN, East New York.

In the regulation school of forty years ago it was the custom to hold session from 9 A. M. until 12 M., and from 1 P. M. until 4 P. M. Somewhere in the midst of each session the school was turned out of doors for about fifteen minutes, and scenes of the wildest confusion ensued. This legacy of the recess has descended to us under the idea, that since exercise and changes of air and position were needed for sanitary reasons, all these were accomplished by sending a set of ignorant school children into a yard.

Who first proposed the idea of abandoning the recess it is not known, neither does it matter. It is known, however, that in 1874, the school at Owego adopted the plan, and that it has pursued it ever since with the most gratifying results. Albany, Rochester, Cohoes, and Troy have followed, and all bear testimony of its good effects. In 1876 the recess was abandoned in the school at Flatlands, and until recently was not resumed. During the past year no recess has been held in the school at Bayridge, and the plan meets with the approval of both patrons and teachers.

Advocates of recess claim that the relaxation exercise and other changes produced are needed by both pupils and teacher, but in their haste to clinch this argument forget that no one denies it.

The thing under consideration is, not whether these things are needed, but whether they are best secured by the recess.

Another argument urged is, that this promiscuous intermingling of the good, bad, and indifferent upon the school playground fosters a democratic spirit. Perhaps it does, but in my judgment, it is much like the dervises of some of the North African states, who are constantly torturing and mutilating the body, in order that they may the more keenly enjoy pleasures of Paradise hereafter.

There is nothing more detrimental to the morals of a school than the recess. One bad girl or vicious boy can inculcate more immorality in that fifteen minutes than the teacher, work he never so zealously, can eradicate in all day. Obscenity, vulgarity, and brutality all meet on the school playground. If the yard is kept under supervision, it occurs slyly; if the yard is not supervised, then openly. By abandoning the recess these may all be checked. The pupils are in the yard only when occasion requires, and then only for a brief, specified time; and that time is not sufficient to allow any flagrant act of impropriety or immorality.

Albany and Rochester both bear witness to the fact, that cases of discipline decreased seventy-five per cent. after the abolition of the recess. It is also no longer necessary to keep the pupils under especial supervision while in the yard, and as a consequence, idleness is not engendered and uprightness is cultivated. The result must then be to elevate the moral tone of the entire school.

The recess is a frequent cause of injury to the health. It is often impossible for a teacher to see that all the pupils are suitably wrapped for going into the colder outer air, and, as a consequence, many of them, especially the

girls, are apt to rush out of the overheated rooms, insufficiently protected. The natural result follows—coughs and colds are far more frequent, and lung and throat diseases are by no means infrequent visitors to the school-room.

When the class-room has been emptied, it is often considered necessary for sanitary reasons to lower the temperature. The children returning overheated from the exercise of the play-ground, are obliged to sit in a room whose temperature is much lower than their own. The danger to which they are thus exposed is obvious.

Much time is wasted at recess. An old proverb says time is money, and copy-books used to unite to it the injunction that neither should be squandered. When pupils return to the school-room, full of the excitement of their sports, it is an impossibility for them to give immediate and proper attention to their lessons, and the time required for things to adjust themselves is simply lost time.

In many localities it is often necessary for the children to carry dinners to their elders whose labors will not permit them to return home to the midday meal. The hour usually allotted to the noon recess is not sufficient to allow children to perform these duties and return to the school at the beginning of the afternoon session. If now the time usually given to the recess is added to the noon intermission, these otherwise tardy pupils will have performed their errands, and will be at school in season to take part in the first part of the first exercise. This, if not an actual saving of time, is an economy of time.

The recess is a fruitful source of accidents. On the school-ground, where large and small congregate and engage in different games, accidents are liable to occur. These, though often of a trivial nature, are sometimes more serious. Contusions, dislocations, and fractures are by no means so uncommon but that a remedy should be sought for. On the play-ground the timid, delicate child is exposed to the bullying and roughness of its more aggressive or robust companions, a disposition that needs especial care and training from the teacher in order to make it assert its individuality, is often so dwarfed and retarded that the ill effects are never overcome. Who knows but that if those days at school, which the poet Cowper described as the unhappiest in his life, had been spared him, those after dark days, when reason deserted her throne, would have also been spared him. Judicious care might have changed a brooding mind into one enlightened by hope and ruled by judgment. It is impossible to estimate what injury the bullying of a brutal boy may do to a child of more delicate organization. A child fresh from a refined home is ill fitted to be exposed to all the immorality and vulgarity, which he will meet in a greater or less degree if he is compelled to mix in the small compass of the school-yard with all who congregate there. If left to himself, he might choose congenial companions, but this is an impossibility in the space usually allotted to school property.

All the purposes of the recess can be secured by other means. If the necessary change of air can be obtained in a well ventilated school-room, if the needed exercise and changes of position are secured under the instruction of a careful teacher, bodily health is retained, hygiene is taught to a certain degree, and morality and innocence are preserved. Children should be allowed to leave the room when occasion requires, but they should be taught that this privilege must not be abused, and, if the moral tone of the school is what it should be, there will be no difficulty in impressing this fact upon them.

For purposes of exercise calisthenics may be used, or the pupils may be allowed to move about the room for two or three minutes at a time. These changes may be made two or three times during the session, but they should occur at the times of changes of recitation. In the lower grades the changes should be oftener than in the higher grades. Here the little movement songs with a marching chorus may be successfully used. But whatever the change may be, the teacher must see that it is both restful and refreshing, and then can labor be immediately resumed, and much of the irksomeness of school duties be lightened for both pupil and teacher.

At first there may be frequent calls to leave the room, but these calls are in many cases the result of habits, and with judicious treatment will disappear in a short time. As a result of this careful attention to the children, the pupils will leave the school-room, wearied to be sure, but strengthened mentally, morally, and physically—mentally, from the instruction they have received; morally, from the protection and training each has obtained; and physically, because the muscles have been duly, but not ignorantly exercised.

DOMESTIC ECONOMY.

Directions suitable to a class of younger children:

(a) SEWING ON A STRING.

- (1) Turn down one end of tape and fix it on the wrong side of garment, as far from the edge as the width of the tape.
- (2) Hem the three sides of tape.
- (3) Turn tape back and seam edge of garment to folded part of tape. Fasten off.
- (4) Take the opposite end of tape, turn a narrow hem on wrong side. Hem and neatly sew up corners.

(b) SEWING ON A BUTTON.

- (1) Carefully prick a ring in the button half way between edge and centre.
- (2) To fasten on, slip needle between folds of band. Stitch a small circle in marks already made. Do not draw the cotton tight.
- (3) Bring needle out between button and band. Twist cotton round about six times to stem the button. Fasten off on wrong side.

(c) KNITTING A PAIR OF PLAIN MUFFATEES (TWO NEEDLES).

- (1) Cast on 48 stitches, thus: Knit one, pass newly made stitch on to first needle.
- (2) Knit the required length in the following manner: Knit 2, pass wool to front, purl 2, pass wool back. Slip first stitch of every row to make chain edge.
- (3) To cast off, knit two stitches, pass first stitch over second, repeat till only one stitch remains.
- (4) Draw this out, break off, leaving end sufficient to sew up cuff.
- (5) With this, thread a worsted needle and sew up cuff carefully darning in the end on wrong side.

WELL TRAINED perceptive powers are beneficial, because: (1) They furnish proper material for the other mental powers. (2) By their action they furnish a stimulus for the exercise of the reason. (3) The work of the other powers will then be more reliable. (4) We can then acquire knowledge more accurately and more rapidly. (5) We will be enticed to the study of nature. (6) They mark the practical man of business.

SUPT. GEORGE GRIFFITH.

A LESSON ON SPACE, DISTANCE, AND SUN.

BY S. H. HOPKINS.

FACTS. The earth is 25,000 miles in circumference.

QUESTION. At the rate of five miles an hour, and fourteen hours a day, how long would it take to walk around this planet?

FACTS. The moon is 238,000 miles distant.

QUESTION. At the rate of 70 miles a day, she could be reached in how many years?

At the same rate how long would it take to go around the earth?

ASK. How many grains of wheat in a handful? In a pint?

FACTS. Representing the earth by a grain of wheat, nearly four bushels would be needed to represent the sun.

FACTS. From the spinal cord arise nerves, each nerve having two roots, motor and sensory. These nerves are distributed throughout the body, and make up what may be likened to a double telegraph line. The cook, while working over the stove, brings her hand in contact with a hot surface. Nerves forthwith carry in the sensation of pain, and straightway outward on other nerves speeds the command, "Move your hand." Between the burning and the movement there is but a brief interval.

Could an infant this moment thrust out his hand and plunge it immediately into the sun, he would be well advanced in years before the charred member could be withdrawn in response to the pain signal!

FACTS. A man in the distance hammering, the hammer descending for a second blow before the first is heard.

The steam ascending from a running train before the sound of the whistle is heard.

TELL. The velocity of sound is about 12 miles a minute.

QUESTION. How long would it take sound to circle the earth?

FACT. Light moves 185,000 miles a second.

QUESTION. How many times could light circle the earth within a minute?

QUESTION. How long would it take an express train, running at the rate of 40 miles an hour, to make the round trip between the earth and the sun?

QUESTION. How far distant is a star that requires light 25 years to come from it to the earth?

FACT. It takes light from the pole star 25 years to reach us.

CONCLUSION. Even the thought of such distance is too wonderful for us; it is so high we cannot attain unto it. What, then, shall we say of those myriads of stars whose combined creamy light constitutes the milky way, and whose distance from us is so vast that their rays, which are only now reaching the earth, started out long before the birth of Christ?

A PRIMARY LESSON IN PHYSICS.

Teacher. What does this resemble, John? (Holding up a magnetic horse-shoe before the class.)

Pupil. It looks like a horse-shoe.

T. What have I on this paper, Mary?

P. Tacks.

T. Take this horse-shoe in your hands and examine it closely, Jennie. Do you see anything very strange about it?

J. No, ma'am; only it is too small for a horse.

T. Hold it close to that tack and see what will happen.

J. Why, the tack sticks to it.

T. Leslie, take it and touch another tack with the one sticking to the horse-shoe. What has happened, John?

J. That tack sticks to the first one. Look! Why, another sticks to that one, so does that one! Why, they act as if they were strung on a string!

T. Hold this steel bar near the tacks. What happens, Willie?

W. Nothing; the tacks will not stick to it.

T. Willie, hold the bar this way and strike it two or three times with that wooden hammer. (The bar must be held vertically.) Strike it harder. That will do.

Now, hold it near the tacks and see the effect. What is it, Nettie?

N. Why, the tacks stick to the bar.

T. Hold your knife blade near it, Jimmie. What do you notice that is unusual?

J. It draws the knife to it.

T. Mary, hold a pin near the bar. What happened?

M. Why, the pin flew out of my hand!

T. From this what do we find can be attracted?

P. Many things.

T. Nettie, see if it will draw your hand?

N. No, ma'am.

T. Will it draw wood?

P. No, ma'am.

T. What were the articles made of which it did draw?

P. Some kind of metal.

T. Do you see any change in the bar, Mary?

M. No, ma'am: it looks just as it did before Willie struck it.

T. But from what we have seen, do you think there is any change?

M. Yes, indeed, or the tacks and pin would not stick to it.

T. I could make this steel bar so it would attract iron that way, by wrapping a copper wire around it and passing a current of electricity through the wire; but we will notice that when you study philosophy. There is, also, a kind of iron ore dug from the ground which attracts, and these horse-shoes are made of it.

This strange drawing power we call magnetism, and a body that has it we call a magnet.

Now, you may write all you have seen and learned in this lesson.

SCHOOL-ROOM ORNAMENTATION.

We want suggestions on How to Ornament the School-room, or How to Make a School Attractive. Send an account of what you do.—Table Talk in THE JOURNAL.

School-room ornamentation is a matter of importance to teachers and pupils, as many of us spend one-fourth of our time in our schools; and as our surroundings have an undoubted influence in the formation of character, the arguments which suggest the ornamentation of the house apply also to the school. There are few, if any homes, even the very humblest, in which there is not some attempt at ornamentation; but there are many school-houses in which there is nothing done in this direction.

The effect of proper school-room ornamentation, whose educating influences go on silently, but forever, cannot be perceived by some teachers, which doubtless accounts for their neglect; but the effect of this negligence can readily be perceived by any educator of experience in the slovenly character of the work done in such schools. That which is beautiful is so near to that which is good that no teacher should plead he has no time, or his cir-

cumstances are such that he cannot attend to this matter. He should take time—he should alter the circumstances.

Any plan of school-room ornamentation, to be successful in the highest degree and most valuable in results, should enlist the pupils themselves. I would rather have the walls of my school-room ornamented by the handiwork of teachers and pupils, crude though it be in some cases, than to have them covered with flashy pictures, selected without a thought as to propriety, and hung without care.

Mottos wrought in evergreen and placed on the walls may call forth the assistance of every pupil. Ask the boys to furnish the material for this work—tacks, hammers, pasteboard, step-ladders, etc. Let the teacher do his part by cutting out pasteboard letters composing the words of the mottos, giving one to each girl with instructions to cover one side with arbor vitae. Don't tell them which side to cover. Those who are not close observers will make mistakes, as I have had letters returned to me with the following results, s, g, and x. The following mottos: "Nothing is impossible to industry," "The race is not to the swift, but to the faithful," "Beware of him who hates the laugh of a child," with designs of a cross, anchor, and heart furnished a little work to each of 40 pupils, and they liked it. Do not make it a task. Manage so the pupils will deem it a privilege.

Drawings by pupils placed on the walls or occupying places of honor on the blackboard will serve the double purpose of ornamentation and as incentives to study. Flowers will serve as ornaments while cultivating a taste for the beautiful, and furnishing material for many practical lessons. On special occasions, as the celebration of the birthdays of Washington, Longfellow, Bryant, etc., fine pictures, appropriate to the occasion, may easily be obtained for the asking for temporary use. The variety thus obtained commends this plan. A new motto or choice quotation every morning, or at least every week, neatly executed by the teacher in Old English, German text, or other ornamental letters on the blackboard, is a plan I have found pupils taking surprising interest in without so much as a word from the teacher. And it is remarkable how quickly some of the pupils will "take it up," until you can safely deputize some of them to do this work. All this without the teacher's appearing to know that such work is on the board, which he should be careful to place there before the pupils are admitted. If the teacher hasn't the skill to do this work he can and should acquire it.

No set rules can be given on this subject, and no one plan is so good that it should be used to the exclusion of all others. The teacher who understands his business will be full of expedients in this matter, as in all others arising in his school work, and he will adapt himself to his circumstances, and evolve something in the way of school-room ornamentation that will yield a hundred-fold in good results.

T. B. MCCAIN.

Wood's Run, Pa.

THE RELIEF MODEL: ITS VALUE IN GEOGRAPHY TEACHING.

The apparatus helpful for teaching the facts of physical and descriptive geography in their natural and scientific grouping are the RELIEF MODEL, and maps shaded so as to yield the same effects as the model. A model of excellence serves an educational purpose, helpful to actual travel and direct contact, for it exhibits a grouping of phenomena on such a scale that they can be simultaneously seen in their natural relations, whereas in nature one feature—a mountain mass, for example—frequently fills the entire view.

Mr. Keltic says: "In Germany the use of sand to build up the features of a district is generally in vogue. In the first Realschule of Leipzig, for example, the staff map of a district is used, and the pupil made to build a sand relief, with careful regard to the contour lines. Another method of teaching the significance of cartographic symbols I found in a secondary school in Zurich, in a class, the pupils of which were about twelve years of age. Taking the carefully-drawn maps for the purpose in the beginning of Wettstein's fine school atlas, the pupils are made to cut out pieces of cardboard for the different levels, and so build up a relief, which enables them to realize what the symbols signify. As the contour lines are combined with carefully-graduated mountain shading, the pupils thus come to learn the significance of the customary map-symbols. Specimens of these reliefs will be found in the exhibition. There is no doubt that the judicious use of good reliefs, along with corresponding maps, is a very effective method of teaching the pupil to interpret maps."

TABLE-TALK.

MISTAKES.

These will occur in the best-regulated families. Of this, long experience has proved the truth. Mistakes will also occur in printer's rooms. Types will tell all sorts of stories. It is by no means certain that when an author writes an article, it will be printed as it was written. He may be exasperated, but it doesn't help the matter. The types are hard things to talk to. When a type-setter makes up his mind that "alma mater" is "alum water," all the world can't convince him to the contrary. He will set it as it pleases him. Here are a few illustrations from a London paper.

A member of Parliament quoted, in the course of a speech, Byron's description of dogs eating the slain under the walls of Corinth. The lines—

"From a Tartar's skull they had stripped the flesh
As you peel a fig when the fruit is fresh"—

were spoiled by the reporter, who made the second begin: "As you feed a pig." Another line which the speaker quoted was, "As they lazily mumbled the bones of the dead," and the first words of this were changed into: "As they largely resembled." An American senator once cited a hackneyed Latin sentence, which he rendered: "*Amicus Cesar, amicus Plato, sed major veritas.*" When he looked in next morning's paper for the evidence of his classic love, he saw it transformed into, "'I may cuss Caesar, I may cuss Plato,' said Major Veritas." A bishop was made to give it as his opinion that "curates" were a hindrance to the spread of the gospel, when he meant "pew-rates." Another bishop (of whom Lord Brougham used to tell) was worse treated. In the course of his episcopal duties, he visited a country church which was sadly out of repair. He rated the authorities soundly for their neglect, and closed his lecture by saying that he would not visit their damp old church again. The intelligent reporter of the local paper made him declare he would not visit their "d—d old church again." The bishop, horror struck, at once wrote to the editor. His letter was published with a foot-note: "We willingly insert his lordship's explanation, but we have every confidence in the accuracy of our reporter." Writers of short-hand will easily understand how "mother's prayer" became "matter prior," and "baking bread" "begging bread"; how "The leaders of the Crusades were a goose and a goat," was converted into "The leaders of the Crusades were a good Sunday coat," and "I am a partner at the Low Moor Works," into "I am a pauper at the Low Moor Workhouse."

It must also be borne in mind that errors which are ascribed to the stupidity of compositors are often due to bad "copy"; an illegible manuscript is often excused on the ground that "printers can read anything." A lover, for example, addressed to his mistress a passionate poem wherein he spoke of the night when "he kissed her under the silent stars"; and it could hardly have been the compositor's fault that he was made to say that "he kicked her under the cellar stairs." Was it the printer's or the author's fault that the "sixty fancy windows" of a draper's shop appeared as "sixty faded widows"; that a prosperous merchant was "thieving as usual," instead of "thriving"; and that the *Pittsburg Argus* described "a noble old burgher proudly loving his native state" as "a nobby old burglar prowling around in a naked state"? The *Survey Comet* converted "Mrs. Siddons as the tragic muse" into "Mrs. Siddons as the tragic nurse," and the *Illustrated London News* made Mr. Sala talk of presenting a bride with a "beautiful bridle" instead of a "beautiful Bible." These errors, to whomsoever due, illustrate a common experience: Blunders, consisting of the substitution of one word for another, or of the omission of a word, are allowed to pass unnoticed where a fault in orthography would be instantly detected. The correction of proofs is to some extent a mechanical process, and it is often carried on when most honest folk are in bed. With his mind wandering, or his brain weary, the "reader" looks only at the spelling of individual words, and, provided that be right, he does not trouble himself about the meaning of all the words taken together. How else can we account for "the parable of the vinegar" appearing for "the parable of the vineyard" in the heading of Luke XX. in an edition of the Bible issued by the Clarendon Press in 1717; or for the omission of *not* in the seventh commandment in an edition published during the reign of Charles I.? A similar omission occurs in another edition. The second negative was left out of I. Corinthians vi. 2, so that the passage read, "Know ye not that the unrighteous shall inherit the kingdom of God?" Thackeray, in

his "English Humorists," was made to call Smollett's Dr. Morgan a "wild" instead of a "Welsh apothecary," and Mrs. Manley a "detestable" instead of a "delectable authoress." The *New Haven Register* once said: "In the article upon Yale College in our last, for 'alum water' read *alma mater*." The first verse of a little poem by So they was printed:

"Sweet to the morning traveller
The song amid the sky,
Where, twinkling in the dewy light,
The skylight soars on high."

Printers are often blamed for errors of which they are quite guiltless—the errors of reporters. Speakers are sometimes inaudible, and a reporter sometimes transcribes his notes without thinking of the sense of what he is writing. The result is occasionally ludicrous. At the Pembrokeshire quarter sessions, a magistrate, whose utterance was very indistinct, protested against the extravagance of supplying the county lunatic asylum with sea-kale pots. The representative of the *Haverfordwest Telegraph* changed the object of the worthy justice's indignation into "zinc ale-pots."

READING CIRCLES.

The Executive Committee of the Iowa Reading Circle Board consists of the President, Prof. H. K. Edson, Grinnell; Vice-President, Prof. E. R. Eldridge, Columbus Junction; Treasurer, Col. Alonzo Abernethy, Osage; and Secretary, Prin. F. E. Stratton, Davenport. The other members of the Board are: J. W. McClellan, Vinton; J. P. Hendricks, Toledo; Dr. S. N. Fellows, Iowa City; Miss Delia Knight, Oskaloosa; and D. A. Kent, Des Moines.

The Board has adopted the Chautauqua plan of pursuing the course of reading, that is, new members joining the circle, begin with the year or half-year of reading in hand. Those who begin the reading next September will commence with the second year in the course. Thus, all members of all the circles will be pursuing the same work at the same time. This will avoid the forming of new circles for new members of the circle. The Board has adopted the following:

First Year—1885-6.

1st half from Sept. to Feb.:

History.—Barnes' General History to page 202;
Literature.—Page's Theory and Practice of Teaching;
Science.—Hunt's Physiology.

2d half from Feb. to July:

History.—Barnes' General History from page 203 to 417;
Literature.—Richardson's Literature;
Science.—Balfour Stewart's Physics.

Second Year—1886-7.

1st half from Sept. to Feb.:

History.—Barnes' General History completed;
Literature.—Swinton's Studies in Literature or Swinton's Classic English Reader;
Mental Science.—Watt's on the Mind.

2d half from Feb. to July:

Literature.—Swinton's Studies in Literature or Swinton's Classic English Reader;
Political Science.—Andrew's Manual of the Constitution;
Natural Science.—Wood's Natural History.

THE INDIANA READING CIRCLE.

Educational institutions, whether direct or indirect, necessary or incidental in their nature, are never made; but grow up to the full vigor and strength of maturity in their own proper times. It was thus with our common schools, it was thus with normal schools, and so it was with the Indiana State Teachers' Reading Circle, an institution destined to do more for the teachers who belong to it than county and township institutes have ever done or ever will do. It had its origin in the need felt by the teachers for better knowledge of a strictly professional nature. During the first year, there were 1123 members enrolled and reported to the secretary, each one paying a membership fee of twenty-five cents for the year. This report was made last June, but now there are doubtless more than two thousand members, summer normals and county institutes having exerted a wonderful influence in its favor, inducing large numbers to buy the books and begin the work, who would not otherwise have done so.

Each Co. Supt. in the state is manager for his county; if he cannot serve, he names a teacher for that position,

and the books, generally, are ordered through him, arrangements having been made with a book-firm in Indianapolis to get the books at reduced rates. The course covers four years, and at its close, diplomas or such honors as the directors devise, will be issued to those who have successfully completed the work outlined. Stated examinations will be held by county superintendents, and the papers of the applicants forwarded to H. M. Skinner, Indianapolis.

Such in brief, is the plan, and workings, and prospects of our reading circle; and we are proud of it. What its future will be we cannot tell, simply because thought cannot be measured, but it has before it a prospect in Indiana as flattering and as great as the Chautauqua has in its sphere, though they are quite different in character and scope.

E. M.

GENERAL EXERCISES.

AN OBSERVATION EXERCISE.

SPIDERS.

A few days previous to the exercise, the teacher announces the subject and calls for volunteers to take each of the divisions given below, as they are read off. Two or three pupils may take the same division, as three pairs of eyes would be likely to see more than one pair. After these have been assigned they may be written on the board, and allowed to remain until after the exercise.

WHAT TO OBSERVE.

1. The spider's home and haunts.
2. Its body, color, shape, and structure of parts.
3. Its acts:
 - a. How it gets its food.
 - b. How it spins its web.
 - c. How it fights its enemies.
 - d. How it takes care of its young.
4. Its web—shape, texture, location, use.

Drawings of spiders, of magnified portions of their bodies and of different kinds of webs may be prepared and placed on the board. After the observers have all given their reports on the day of the exercise, the following interesting facts may be read or related by several pupils previously appointed.

WHAT OTHER OBSERVERS HAVE SEEN.

A GREEDY SPIDER.—I once saw a spider take a string of his web down a wall, and lay it carefully across a board, a neat little trap for the poor fly. Pretty soon some flies came around, and one happened to get his feet entangled in the cord. The spider then ran up the wall with his shackled victim, and rolled him up in the web at home, then he started down for more. The work was continued until this one great spider had caught eight flies, and still the trap was laid for more, but no more flies came that way that afternoon; so when the spider was tired watching, he hurried home to his rather late dinner. He walked straight up to the first fly, which was lying still because the web was wound so tightly around him that he could not stir. The spider hugged the fly, I thought at first, but later I found he was sucking the blood. He put his head close to the fly right where the head joined the body. I think, that is where the spider always begins to suck a fly's blood. The taste of blood made the spider forget that his victim had any feeling, and in a moment, by a vicious jerk, the fly's head was snapped off. In this way he disposed of three of the flies, and then went off to rest, probably.

A few minutes after this, some queer looking insects came out of a crack, above the spider's web. They were nearly white in color, and I did not know whether they were young spiders or not; from their color I thought they were not. However, they must have thought that some of the dinner was intended for them, for they immediately set to work at eating the flies. These were not as particular as the spider; they ate everything except the legs, and on examining the web I found that the heads of the flies were not eaten entirely, but only the inside—the brains probably. This fact, their eating part of the flies instead of sucking the blood, also led me to believe that these were not spiders.

NOTE.—These observations were made by a young pupil in the Albany State Normal School.

A CAUTIOUS SPIDER.—In a clump of moss, I once found a small tunnel, the top of which was closed by a trap-door. The inside of the tunnel and the door was lined with silk. The hinges of the door were made of strong silk threads, and it was so nicely fitted to the mouth that water might have been poured over it and none would have entered. This queer tunnel was the home of a large, black, trap-door spider. I happened to see him run to the door, open it and disappear inside or I never should have discovered it, for the top of the door was so nicely covered with pieces of moss that it could not be seen. I thought I would like to pay the spider a visit, and gently opened the moss-covered door. He very promptly and rather impolitely slammed it in my face, and then hung on to it so fiercely that I had some difficulty in getting it open. When I did so no spider was to be seen. I examined his silk-lined home very carefully

but could see no trace of him. After a long search, I found a little hidden chamber connected with the large one by a secret door. Here crouched Mr. Spider, apparently much surprised that any enemy could have found him out.

A CHARMED SPIDER.—While a gentleman was watching some spiders last summer, it occurred to him to try what effect a tuning-fork would have on the insects. He suspected that they would regard the sound just as they were in the habit of regarding the sound made by a fly. And, sure enough, they did. He selected a large, ugly spider, that had been feasting on flies for two months. The spider was at one edge of its web. Sounding the fork, he touched a thread at the other side of the web, and watched the result. Mr. Spider had the buzzing sound conveyed to him over his telephone-wires, but how was he to know on which particular wire the sound was traveling? He ran to the centre of the web very quickly, and felt all around until he touched the thread against the other end of which the fork was sounding; then, taking another thread along, just as a man would take an extra piece of rope, he ran out to the fork and sprang upon it. But he retreated a little way, and looked at the fork. He was puzzled. He had expected to find a buzzing fly. He got on the fork again, and danced with delight. He had caught the sound of the fly, and it was music to him.

A FLYING SPIDER.—There are certain tiny spiders called gossamers, which have a curious power of floating in the air. They have been seen on the tops of lofty spires, and they are sometimes so numerous that the air is full of their floating webs, and the ground is white with those that have descended. Their mode of ascent is this. They climb to the top of some elevated object, if it be only a grass-blade. They then pour out a long, slender, thread-like web, which shortly begins to tend upwards. As soon as the spider feels the pull, it crawls upon the web, and sails away into the air. The duration and height of the ascent depend much on the wind and character of the atmosphere. The web ascends because it is for the time lighter than the atmosphere. But, as it gradually becomes laden with the moisture that more or less fills the air, it becomes heavier than the atmosphere, and gently sinks to the ground. What may be the object of these aerial voyages no one knows. They may be for the purpose of capturing minute insects, or they may be for mere amusement.

THE FAMILY WALK.—Mrs. Spider has a very curious way of keeping her large family together when she takes them out for their first walk. There are a hundred or more of them, but it does not confuse her at all to keep track of them, for she carries them all on her back. This gives them a chance to take the air in safety, as she crawls about in search of food. Sometimes they stray away; but they easily find their way back by an apron-string-like arrangement, with which nature has provided them. Each young spider, as it leaps or crawls from the mother, first attaches to her a delicate thread of silk, by which it returns, and the curious sight is often seen of numbers of little spiders walking back to the parent on these invisible cords.

AN ILLUSTRATED STORY.

Write the italicised words in the stanza below on separate slips of paper, number them 1, 2, 3, etc., in the order in which they come in the selection, and distribute them among the pupils, asking them to be prepared to draw a picture of the object named upon the board in a few days. At the time appointed, write the lines on the board, placing the numbers of the objects distributed in place of the italicised words. Write only a line or two in a place so that several may work at a time. Then call on the pupils having the slips to draw their pictures in the places indicated by their numbers. After all are drawn, call for volunteers to read the lines. It will add to the interest of the exercise to hand the slips to the pupils, privately requesting each one to keep the matter a secret until the time for the exercise:

The owl and the pussy-cat went to sea
In a beautiful pea-green boat,*
They had some honey† and plenty of money
Wrapped up in a five pound note.
The owl looked up to the moon above,
And sang to a small guitar,
"Oh, lovely pussy! oh, pussy, my love!
What a beautiful pussy you are!

* Some green crayon may be given to the pupil who draws this.

† A picture of honey-comb may be used for a copy.

NOTE.—Any other selection having a number of object words may be used in place of this.

NOTE.—A portion of "Inventor's Day" was left out last week, and those given did not appear in their proper order. James Watt precedes Robert Fulton in their relations to steam-power, and Benjamin Franklin is followed by S. F. B. Morse, and then Mr. Edison in the subject of electricity. It would be well to remember other great inventors in connection with these. Many interesting facts concerning them may be found with a little searching. While the interest is still fresh, lines of investigations may be started in the several directions suggested by these sketches.

INVENTORS' DAY.

JAMES WATT.

I.

Just outside the city of Glasgow was once a large grassy meadow where the "lasses" used to go with their "hail-pots," in which they boiled their clothes, and spread them upon the grass to bleach. One fine Sunday afternoon, when there were no lasses about, a young man took a walk across this meadow. He walked slowly with bent head; thinking, thinking, on a subject that he could not get out of his mind. Suddenly he stopped, his face flushed, "I have it," he cried, and he started for home.

It was James Watt. For months and months he had been experimenting with a steam-engine. There was one difficulty which must be overcome before it could ever be put to any use, but he could find no way of overcoming it. Whether the picture of the steaming "hail-pots" of the lasses who assembled there on week-days suggested the thought or not, history does not say, but there it was that Watt received the idea that made the steam-engine a power for driving machinery.

II.

It is said that James Watt could never look at a machine of any kind without at once being seized with a desire to find out how it worked, to pull it apart to see how it was made, and then go to work and make a better one. His father kept a little shop to which all kinds of instruments were brought for repairs, so that young Watt had a good chance to learn the workings of ordinary machinery, and to exercise his genius for improving. He once repaired an organ that was brought into the shop, and immediately afterward set to work to make a better one. He knew nothing about the principles of music, so he obtained an old book on harmony, studied up the subject, and produced the best organ that had ever been made.

The more he experimented with machinery, the more anxious he became to learn its principles. He studied all the books he could find on philosophy and chemistry, and soon he was called to teach these subjects in a university. While here the model of a Newcomen engine, which was kept in the college laboratory for the use of the natural philosophy class, was brought to Watt for repairs. He soon had it in working order, and then, according to his usual custom, he began thinking how it could be improved, and did not give up until he had made it a working power instead of a toy.

BENJAMIN FRANKLIN.

I.

When James Watt was only ten years old, Mr. Benjamin Franklin, then a man forty years old, went to Boston, and saw there some experiments in electricity. He was so interested in the strange subject that he bought some apparatus, went home, and began experimenting on his own account. He thought that it was this electricity in the clouds that caused lightning, and determined to find out. He made a kite of silk, attached a piece of iron wire to the top, tied a hemp string to the wire, and waited for a thunderstorm. As soon as one came he went out to fly his kite. To guard against the danger of receiving the current in the hand by which he held the string, he tied a silk ribbon to it to hold it by, and then fastened a brass key to the hemp to catch the electricity when it came down. By and by as he brought one of his knuckles near the key, a spark of fire flashed from it to his hand, and the great problem was solved.

II.

The knowledge he had thus gained, Dr. Franklin put to practical use by inventing the lightning-rod. He performed several other important experiments with electricity, one of which was to pass a current over several lengths of wire; but he was soon called into public service, and kept so busy that he could not find time to continue his study of electricity.

Geometry is easier for children than arithmetic, if properly taught, provided we take away from arithmetic all its mechanical processes. Its direct effect is to stimulate the faculty of drawing conclusions. Take the following theorems. To many they may seem too difficult, but they can easily be made simple. It is certain they are bound to stimulate logical thinking:

"Each side of a triangle is less than the sum of the other two sides, and greater than their difference."

"Of two angles of a triangle, that is the greater which is opposite the greater side."

"If two arcs are equal, their chords are equal."

"The sum of all the angles of a triangle is equal to two right angles."

The subject is full of thought, and will be discussed more at length in the future.

THE THINGS OF TO-DAY.

The copyright bill introduced by Senator Chace amends the present copyright laws by striking out certain reference to citizens of the United States, thereby placing foreign and American authors upon an equal footing. To authors is reserved the exclusive right of dramatising their own works. The importation of any copyrighted work is prohibited, and officers of the customs and postmasters are instructed to seize and detain copies of such works entered at the custom houses, or transmitted through the mails of the United States. This provision, however, does not apply to books printed in a foreign language, of which only an English translation is copyrighted.

The succession to the American Cardinalate has fallen to Archbishop Gibbons, of Baltimore. A learned and scholarly man, yet one versed in knowledge of the world, is the opinion expressed by those who know him, and they hail his selection as that of one who has always exhibited sound judgment, and has a wide and thorough acquaintance with the leading personages among the Roman Catholic clergy of this country.

Up to a very recent period Horatio Seymour had held a position of power as a wise counsellor of his party which has been almost without precedent. The ablest of the more active leaders of the Democracy have gone to consult "the Sage of Deerfield," making no secret of their mission, and recognizing Gov. Seymour's unassisted authority, or "primacy," in the party, with no feeling of humiliation, but rather with pride, that the party had a "sage" so wise, so above all reach of suspicion as to the disinterestedness of his counsels, and so rich in experience.

The German Reichstag has decided to order a serious investigation regarding adherence to the monetary policy of the government. The vote on this question stood 145 in favor of the motion to 119 against. This is a remarkable decision, in view of the powerful arguments made against the motion by Bismarck and his able coadjutors.

The Rev. Dr. Paxton, pastor of the West Presbyterian Church, New York City, on last Sunday gave a most eloquent tribute to General Hancock. It is so good we wish to have it preserved in our columns as a part of the history of our times.

"They buried yesterday my old commander—the ideal soldier—the pure patriot—the noblest man—the stainless name—gentle as a woman, with a voice low and caressing as love in the camp and at the fireside, but heroic as Cid, and with a voice of thunder in the battle to inspire and command. And I shall see his face no more. But while life lasts he will live in my memory, admiration, and love as the grandest figure I ever saw. 'I once saw Washington,' said Chateaubriand, 'but that once was enough. The sight inspired me for life.' For three years I followed him—from Fredericksburg to Appomattox, my hero, lofty, and superb. My heart is sad to-day. The world is emptied; the country poorer in patriots, but richer in treasured memories and immortal names. Glorious Hancock—countryman—comrade in arms! I see you now at Gettysburg thrilling me with the accents of command. I see you in the Wilderness, inspiring me with your dauntless courage. My romance—my hero—my leader—loved with a love passing that of woman—farewell! God rest his soul! And on his tombstone write 'He did what he could' for his country, his God, and truth. And he died poor, but left to his country a stainless name, an undoubted record, an immortal memory."

This is eloquence.

The gross earnings of the reporting railroads in the country amounted in 1884 to \$770,084,908, a decrease of \$53,088,016, or 6.4 per cent. compared with the gross earnings of 1883. The mileage operated was 115,972.

The horrible attempt to carry out a family feud in Illinois by hanging one of the women of the enemy's family was one of the most dastardly deeds ever committed for private revenge. It beats the Kentucky vendettas. There they shoot down men from behind fences, but they at least let the women alone.

It seems to be the impression in New Mexico and Arizona that the Apache Indians will be granted liberal terms, and then march back in triumph to their reservations, only to go on the war-path again when they grow tired of life at San Carlos. There is nothing as yet to support this supposition. General Crook realizes what crimes these Indians have been guilty of, and that they must not go unpunished.

No measure has been introduced in Congress that pleases the farmers so heartily as the bill to punish dealers in bogus butter. It provides for a heavy fine for selling oleomargarine as butter, and also places a special revenue tax upon its manufacture. There is no politics in the act, and it should be supported by Republicans and Democrats alike.

Major-General Hancock was buried last Saturday, and ex-Gov. Seymour last Tuesday. These two distinguished men, both candidates for the Presidency, were not far separated in death.

The Blair bill, granting national aid to education, is likely to be submitted to a more thorough revision than was the case two years ago when it first passed the Senate. The control of the National Government over the money given to the different states will be more clearly defined, and the checks upon the final disbursing agents of the fund made more rigid. It is greatly to be desired that some bill granting national aid to education should become a law; but it is also more greatly to be desired that it should not provide comfortable retreats for an array of pseudo-political-educational men who patronize schools for the money they can get out of them.

EDUCATIONAL NOTES.

CALIFORNIA. Miss J. Ostrom, of Monterey, has opened a school for young ladies and children at that place.

COLORADO. Elwood Mead, formerly professor of mathematics in the state agricultural college, has been made professor of engineering and physics in the same institution. Prof. Mead's knowledge of irrigation engineering will make him a valuable man to the college. —Mrs. Lottie T. Corlew, for several years connected with the training school at Courtland, N. Y., resigned her position in Fort Collins to take the position as principal of the Hinsdale school in Pueblo. —The school board of Ft. Collins has supplied the vacancy by employing Florence M. Whiteley, of Alamosa, a graduate of the Oswego normal. Miss Whiteley was released by the school board at Alamosa before engaging at Ft. Collins. She proves a strong teacher in the new position. —Miss Kate Clark is entering upon a course of training in kindergarten work with Miss Sara Allan, of the Ft. Collins public schools. Miss Lizzie Mellings began in September, 1885, and the two will now prosecute their studies together. —Larimer County sent sixteen representatives to the S. T. A. This is one-third of the whole number of teachers employed. —Preparations are already being made for a summer institute in Larimer County. It will probably begin the week following the meeting at Topeka. The coming institute will be the fourth annual meeting of the teachers of this county, and will last three weeks, instead of two, as heretofore. —Prof. Gwilym Thomas, of Boston, who became teacher of music in the public schools of Ft. Collins upon the resignation of Prof. Adams, now of Denver, is proving successful. He has a large amount of private work in addition to the classes in school. Tonic Sol-Fa has come to Colorado to stay.

IDAHO. The present attendance of the state normal school is larger than that of any previous term of corresponding season. Both faculty and students are in good working order. Miss Lillian Bartlett, principal of the Model School, a skillful kindergarten, is giving a valuable course of lectures on kindergarten to the graduating class. —The Shenandoah Commercial Institute opened its second winter term Jan. 21. The spring term will begin April 1. Mr. Wm. M. Croan, of Shenandoah, is superintendent; Mr. O. H. Longwell, A. M., principal.

KANSAS. The Campbell Normal University, at Holton, has greatly prospered under the administration of President J. H. Miller. Its last catalogue enrolls nearly 400 students. The citizens of Holton have shown great liberality to this institution, and are thoroughly interested in its growth and prosperity. This may be expected in a community of such intellectual and moral culture. The healthfulness and beauty of the place, the absence of all saloons, and the cordial sympathy of the people with the students make it a most eligible place for such an institution.

—Minneapolis (Kansas) is growing rapidly, and is showing great interest in public improvements, and especially in everything relating to education. Her new graded school house is a model. The court house, now building, is a fine structure, and will be completed without any debt. The remarkable progress lately made in the schools of this town and county is largely due to the wise and efficient efforts of R. S. Hillman, who is the right man in the right place.

MISSOURI. Educational matters are receiving more attention here than formerly. Under the skillful supervision of Supt. W. E. Coleman our grade of teachers and schools has been greatly uplifted. Reading circles and institutes are becoming very numerous, and the result is the rapid improvement of the teachers. —The Caldwell County teachers are lively workers; they keep up a splendid institute. The membership is about seventy-five. The next meeting will be held in March, and is looked forward to with interest.

MASSACHUSETTS. The School of Expression, Boston, has issued its first report, which shows the successful condition of the school, and gives an outline of the work done.

MICHIGAN. The State Teachers' Institute for Crawford and Roscommon counties was held at Roscommon, Feb. 1-5.

NEW JERSEY. Princeton College has conferred the degree of A. M. on Supt. Ba. Ringer, of Newark. —The old course of study in the Jersey City schools has been thoroughly revised, necessitating the regrading of the schools, so that now the children take eight and a-half years to reach the high school, instead of six as by the old arrangement. The new methods are being introduced very thoroughly by Supt. Edison. —Prof. Wilson, of the Verona public school, has been appointed postmaster of the town. —At the Gloucester County Teachers' Association, held at Woodbury recently, Mr. E. D. Riley, of Westville, read an interesting paper on "Teachers' Meetings—How Promoted." Prof. Edison, of Jersey City, gave an address upon "Developing the Thinking Faculty;" also a discussion of "Primary Work." The next meeting is to be held March 27.

NEW YORK. The Queens County Teachers' Association met at Farmingdale, Feb. 6. Mr. L. M. Burdick, of Freeport, read a practical paper upon "Vocabulary." He thinks the spelling book is still a necessity. Mr. Williams, of Central Park, L. I., gave a lesson upon "The Use of the Globe." Mr. W. J. Ballard, of Jamaica, explained "Decimals," treating them, not as fractions, but simply as extensions of the decimal scale to the right of units. Miss Ella Boldry, of Merrick, read an excellent paper upon "Imagination." No more practical and suggestive one has been read before the association in many years. "Keeping After School" was discussed. Some favored, others opposed it. The discussion on "Shall We Teach Higher Arithmetic, and Leave Out Such Studies as Physics, Civil Government, Physiology, etc.," closed without discovering one advocate of so-called higher arithmetic. The best and most

practical lesson of the day was given by the principal of the school, Miss Sara Provost, and her assistants; for a nester, cleaner more attractive school-building never was seen in Queens County. The Schenectady County Teachers' Association met at Schenectady, Jan. 29-30. Discussions on the "Geography of the County and Civil Government with respect to the School District and Town" were held during the afternoon of the first day. In the evening a scholarly and interesting lecture on "China and the Chinese" was given by Prof. C. J. Smith, of Viroqua, Wis. On Saturday, "The First Epoch of American History," and "The Circulation of the Blood" were discussed. The arguments on common and decimal fractions were especially lively. These discussions were raised through a series of questions previously prepared by several members of the association. The following officers were elected for the ensuing year: President, A. Parker Gregg, of Schenectady; Vice-President, Miss Sarah Maxwell, of Rotterdam; Secretary, Teller Veeder, of Pattersonville; Treasurer, Miss E. J. Ferguson, of Duaneburgh. The next meeting will be held Friday and Saturday, June 4th and 5th.

The program of the Saratoga County Teachers' Association, held at Saratoga Springs, Jan. 29-30, was essentially as announced in the JOURNAL, Jan. 23. We shall give an account of it next week.

OREGON. Principal W. N. Johnson, of Vancouver, W. T., is having most excellent success. This is his first year in charge of the schools of that city. The local papers speak well of his management. —Supt. W. A. Wetzel, of the East Portland public school, has inaugurated a series of public oral reviews, to be conducted at stated times. The first of the series was conducted last week the subject was "Reading." Neatly printed invitations were sent out, to which the parents and friends responded quite well, considering the very disagreeable day. The reading was excellent, showing careful training. The reading of the little ones was remarkable. The visitors, when asked to name the most noticeable feature of the reading of the little people, invariably replied: "The ease with which they call words, and naturalness of expression." This is the result of close supervision and intelligent teaching. Mr. Wetzel does not think the use of the text-book alone will produce good readers, and has taken subscriptions in the first five grades of the schools for 100 copies of *Baby Land*, 100 copies of *Little Men and Women*, and 200 copies of *THREESOME NOVE*. In the school-room these bright little journals are used as supplementary readers; in the home they are the source of much pleasure and great good. —Prof. J. B. Horner, of Roseburg, has created much interest and enthusiasm among the citizens of that city concerning public school matters. At a public meeting held recently the tax-payers unanimously voted to build a fine brick school-house, with a seating capacity of 600 pupils.

PENNSYLVANIA. During the holidays the Tenny Graded School had an industrial exhibition. The parents, as well as the scholars, were delighted with it. This school has a fine library, and recently the board fitted up a special room for the large collection belonging to the museum. The people of this village feel proud of their school, and stand by their liberal and progressive board of directors. The scholars have just bought a magnificent \$105 microscope.

TEXAS. Prof. W. S. Sutton, superintendent of Ennis Graded School, read a very valuable paper on "Modern Teaching" at the Ellis County Teachers' Association, which was published by request in the local papers.

TENNESSEE. The Broadview high school began its third term of the present year Jan. 11; W. B. Walker, principal.

VERMONT. The State Teachers' Association met at Burlington, Jan. 29 and 30. "School Supervision," the first topic, was discussed by A. H. Campbell, of Johnson, Rev. C. H. Merrill, of Brattleboro, Rev. Thomas Burgess, of St. Albans, and others. Mr. Campbell thought that a good superintendent would always have good teachers and good schools. Mr. Merrill said that the first want of the schools is money, the second, sensible men on the school-boards.

On the question of school hours Mr. O. P. Conant, of St. Albans, thought that recesses could be omitted in most schools with profit. Mr. E. A. Bishop, of Montpelier, thought it never should be omitted with young children. Mr. Sheldon, of Boston, thought it was a question of conditions, but was in favor of recess where the conditions were favorable, with wise superintendence. "Normal School Examinations and their Lessons" was next discussed. Mr. Edward Conant, of Randolph, thought them necessary as a protection against incompetent applicants. Mr. D. J. Foster, of Burlington, said that the normal schools had attempted to do more than could be expected of them. Their object is to prepare good teachers for public schools. They must have scholastic qualifications when they enter.

"Little Things in the School-Room" was discussed by Mr. A. W. Dana, of Barre, and others. Mr. Dana said that it was the little formalities that count in government, and in creating interest among the pupils.

"The School in its Relation to the Home and Family." Supt. Geo. M. Chase, of Derby, thought they should be held in close relations. Mr. J. C. Siller, of Jericho, thought that the right and duty of self-preservation should be taught as a means of saving our homes in their purity. Mr. A. N. Adams, of Fair Haven, thought it a mistake to restrict instruction to elementary branches, for society demands cultured minds. Supt. Justus Dart said that the great question for the state is the abolition of the district system and adoption of a town system. Principal H. F. Davidson, in a further discussion of the relations of the state to education, said that the state owes us protection in our rights—the right to personal security and to personal liberty, but not to be a brute, a whiskey tub, a larger bear oak, a savage, a result, and to use moral means.

Supt. Fox Holden, of Plattsburgh, N. Y., thought that all school training should be more in harmony with the after life of the pupil. A good education determines not so much the calling as it intensifies power for work in any avocation.

Prof. H. H. Buckham, of Burlington, said that many college professors would say to the fitting school teachers, "Do your work more thoroughly, and do not try to cover so much ground."

Mr. S. H. Brackett, of St. Johnsbury, said that in teaching natural science the highest success was gained by minute study of objects.

Miss Eva L. Harrison, of Montpelier, lamented the condition of America in relation to the fine arts. \$131,000,000 are annually sent to Europe, which could be kept at home if we had more schools devoted to art training.

Many other good things were said and wise resolutions passed. The following officers were elected for the ensuing year:

Pres., A. L. Hardy, of St. Johnsbury; Sec., J. N. Hitt, of Northfield; Treas., W. A. Deering, of Burlington.

PERSONAL. Prof. Alexander Agassiz, curator of the Museum of Comparative Zoology, Harvard University, is obliged by ill-health to resign his position. He will seek rest and restoration by a visit to Europe.

President Barrios (whose widow is now visiting in New Orleans) was once upon a time a homeless, uneducated Indian lad without advantages or prospects.

Mr. Gerald Massey has returned to England from his visit to the Australian colonies, and intends shortly to again take up lecturing.

Prince Bismarck is now in excellent physical and mental health, walks a great deal daily, and is in fine spirits.

George W. Peck, who is responsible for the "Bad Boy" book, is said to have made \$100,000 out of it.

S. G. Stockdill, of Armstrong County, Pa., is an excellent manager of institutes. He so arranges everything that all moves off effectively with no friction or flurry.

Mrs. Mary H. Peabody has acquired a reputation as a teacher of history. Her subjects are geological history, the physical outlines of the earth, and its preparation for man; the rise and progress of nations, their mutual relations and influences, and the development of art, science, and literature. She also gives informal lectures to classes of ladies, in courses as desired.

Felix Adler lately exhibited some plaster medallions and other specimens of modeling, of real artistic quality, made by boys gathered from the streets of New York—children of the ignorant and dissolute—and who in some cases were almost totally incapable of ordinary school work.

Dr. N. B. Wenster, of Norfolk, Va., has accepted a position in Yonkers, N. Y. He will be engaged with Dr. Dio. Lewis in editing a new encyclopedia of sanitary and hygienic matters. Dr. W. is a man of great learning. Our readers will be glad to know that in many ways our columns will be enriched by his wisdom.

Prof. Eugene Bouton, of the Department of Public Instruction has been lecturing in Albany on "The Ideal Man." The *New York Tribune* says "that inasmuch as the lecturer did not insist from first to last that God's noblest work is a fine old dyed-in-the-wool free-trader, Professor Sumner, of Yale, will see the propriety of instructing his students that Bouton is to be regarded as an unmitigated liar and an abandoned horse-thief."

Prof. Galliard wishes to announce that he will give FREE LESSONS in French to teachers every Saturday, commencing with Feb. 13, at 56 West Fifty-fifth street, from 10 to 11 o'clock A. M. to beginners, and from 11 to 12 to advanced pupils. Prof. Galliard's method of teaching French has been endorsed by leading educators, including Dr. Howard Crosby, Rev. Dr. Taylor, S. A. Walker, president of the Board of Education; Gen. Webb, president of New York Free College; President Hunter, Normal College; Prof. Boyesen, Columbia College; Miss Anna Brackett, etc. This is an excellent opportunity for teachers who wish to familiarize themselves with this popular and interesting method.

Principal De Grant, of school No. 35, Buffalo, N. Y., has written to the *Courier* of that city an interesting and instructive contribution to the pending discussion with reference to the condition of the public schools of this city. The facts and figures set forth are certainly creditable to the school administration. The communication is worthy of the careful and thoughtful attention of the public. Nothing has been said, so far as we have seen, against the character of Superintendent Croker. The political character of the office, and the direct influence of the aldermen in the management of school affairs, have been the only questions at issue that we care anything about. These are most important in their bearing on the work of the teacher. A Board of Education might be made up of worse politicians, and divided up into more corrupt rings, than a Board of Aldermen. Get school affairs out of politics! Strike at the root of the whole trouble; then, and not till then, can teachers respect themselves.

NEW YORK CITY. ART STUDENTS' LEAGUE.—The advantages for studying art are steadily increasing in this city, and students are being attracted from all parts of the country. A number of students, feeling the need of instruction in art in accordance with the light of modern ideas, formed themselves into a society called the Art Students' League. They maintain and manage an association for the sole purpose of obtaining the best instruction possible in drawing, painting, anatomy, perspective, and composition. The classes are open to all whose artistic knowledge attains a proper standard; this excludes all whose aims are not serious. Special facilities for art study are offered to women. It is planned so that no professor shall become a routine teacher.

The League does not limit itself to any one principle or set of principles. It intends to represent the most progressive tendencies of modern art. The professors have received their education in the best schools of Paris, Munich, and other European art centers. The rooms of the League are hung with photographs, etchings, and reproductions of well-known and standard works of art. It possesses also a number of valuable casts for the use of the students. There are classes in Life, Painting, Head, Antique, Sketch, Costume, and Composition. Some of these are held in the evening to accommodate students who are at work during the day. Among the teachers of the League are found some of our most celebrated artists—Mr. W. M. Chase, Wm. Sactain, Walter Shirlaw, Kenyon Cox, J. Alden Weir, J. C. Beckwith, Frank E. Scott, E. H. Blashfield. Mr. Thomas Eakins, from the Philadelphia Academy of Fine Arts, gives instruction in Anatomy and Perspective. This combination of students enables students with small means to obtain the best instruction possible. For eight months tuition the prices are from \$30 to \$70.

LECTURES.—Mr. Edwin D. Mea has begun a course of lectures on "America in the American Poets," at All Souls' Church, Forty-eighth Street, near Sixth Avenue, on Monday evenings. Dyspepsia, sick headache, and accompanying evils are cured by Hood's Sarsaparilla.

EXTRACTS FROM ADDRESSES DELIVERED AT
THE ITHACA ASSOCIATION.

FROM THE ADDRESS OF WELCOME BY THE HON. E. S. ESTES.

The bond between the schools and the university is thus clearly defined. And we are glad you have come. We would draw from you the inspiration which attracted you to this work. We would wish to impart to you the inspiration that filled the heart of the founder of the university, which fills the hearts of the president and faculty of that institution—and I will not forget that which also animates the hearts of our local county superintendents, of the superintendent of our own union graded schools, and his noble band of teachers who have done so much to elevate the cause of education among us.

Many years ago, before we had any university, Ezra Cornell invited the state officers to come here and look over his proposed location. He took them to what is now the finest university campus in the world, by the way of what is known as the Fall Creek gorge. At that time there was none of the conveniences of access to this grand spectacle of rock scenery that now exist, and as their way up the steep bank it finally became necessary to cross the stream, with rocks rising abruptly on either side no means were at hand wherewith to extemporize a bridge. Mr. Cornell seemed for the moment non-plussed, but he quickly displayed the inventive genius which was his marked characteristic, removing the coverings of his feet and rolling up his trousers he took them one by one on his back dry shod over the water.

And now my friends we again bid you welcome here, and in our deliberations any problem should arise that you find hard to solve, should any stream of difficulties appear to impede your progress, we with the same spirit, if not in the same way, as the noble founder of our university, will strive to carry you safely over if we have the wisdom at our command. May your deliberations prove profitable and instructive to all. And as we shall mingle together, may mutual esteem and regard cement the bond of lasting friendship, and when you go to your homes be assured there will remain with us most pleasant memories of this occasion.

FROM THE RESPONSE OF THE VICE-PRESIDENT, COM.
JARED SANDFORD.

I am a native of the adjoining county of Seneca, and when a boy it was my pleasure, occasionally, to pay a visit to your village. Except, however, to pass through once upon one of your lines of railway I have not been here, until to-day, for more than eighteen years; and what a change is presented to my view in all the surroundings.

In looking about since my arrival, I notice many evidences of your prosperity and growth in importance. Your handsome residences, fine church edifices, substantial business blocks, fine streets, newspaper and manufacturing establishments, public buildings, libraries, etc., splendid school buildings, and your numerous and commodious university buildings, characterize your place as one of solifity, wealth, and culture. Particularly in your educational facilities are you greatly favored, and you, to-day, present a vantage point that can hardly be equaled in this state with its magnificent and munificent school system. The youth of Ithaca can here procure a continuous course of study from the primary through all the grades up to and through the university, and be assured that no superior facilities exist within the state or county. Happy indeed, should be, and fortunate, indeed, are the youth of a community enjoying such unusual and vast educational advantages.

One cannot look back upon the history of your village, sir, without calling to mind one, who in his lifetime was a great benefactor not only to Ithaca, but to the state and nation. It is needless to say that I refer to the late Hon. Ezra Cornell, the founder of your magnificent free library, with its 12,000 valuable volumes, and to whose public spirit, indomitable pluck and energy, and grand munificence your great university owes its existence.

FROM THE ANNUAL ADDRESS OF THE PRESIDENT,
COM. E. C. DELANO.

And now before this nation's eye looms the gray outline of this same sphinx of assimilation; and as it mutely asks: What can you do with me? we must, also, ask: With what shall we attempt the problem? If there rise to the lips the self-answer: The popular will—what is it? whence springs it, whether does it tend?

Hoffman teaches us that the national mind is the essence of the combined opinions of its people. Every wish, every sentiment, every opinion, should enter in some degree into its composition.

Back of the silent swinglines of the stars is an adjusting mind; back of time is eternity with her evolving order; back of the luminous face is the illuminating intelligence; back of words are, or ought to be, ideas; and back of, and interpenetrating all its eternal history and manners, all its institutions, literature, and laws, lives and moves the American mind. With the primitive energy of the forefathers, and the impressibility of "the fathers," the American mind has grown into the most aggressive and the most hospitable, the most cautious yet the most receptive of minds, peculiarly practical and intensely Democratic, not given to philosophizing, but firm in grasp, and bold in its interpretations of principles—conservative, yet composite.

Yet, will its purity of political thought, its widening tolerance, its aliened receptivity, its almost inherited morality, save it from danger sounding ahead, from Scylla and Charybdis, vying for the shattering or the victim of this roving mind of the nation, from Eolus winds, impatient to drive against the barbed beach of money, where bleach the bones of mercenary peoples? An aristocracy whose boast is not blood, nor brains, but bullion, is the summit of common ambition; when his feet are planted there, Lucius, from the top of his achievement, looks abroad over the valleys of moderate acquisition with something like contempt in his eye, and contemptuousness of his lip. Social inequality on the fictitious basis of money, is the forerunner of class collision and national disruption. Let a man have a reputation for any excellence, and let it be known that he is poor, at once he falls far down in the estimation of the world; but let it be understood that he is very wealthy, and the world is his humble servant.

The race for the golden goal has as runners, not the few only, but the many, even the most. Does not the brightness of the American mind tarnish with monetary contact? May not this national mind sink its large capacities in sordidness? To literary genius, scientific aptitude, and the aspiration of art, the stream of national life should be clear, pure, and sweet. But our dead Longfellow could not draw thence, he could only pour into its turbidness the sweetness and purity of his song. America's poets have inspired, rather than been inspired by the American mind. They sprang not from it, as Homer from the Greek mind, Virgil from the Roman, Goethe from the German, and Shakespeare from the English. Poetry breathes not a painful air. The invincible will, the far-seeing, swift-thinking intellect, the reason unconscious in its logic, the sensibilities acutely alive, the imagination that wings its way from mart to mart, from continent to continent—these are the faculties of the merchant mind. Could these be given an upward impulse, would there not be more ripe fruit in literature, more exact thoughts in science, more breathing masterpieces in marble and color?

There is in our land a spirit which welcomes the oppressed, no matter in what language a doom may have been pronounced; no matter whether color an Indian or an African sun may have burned upon him. It is a spirit which needs no precedent to de-throne a king, to hurl defiance at a mother country, to strike the shackles from the limbs of our millions of black bondsmen and place them upon a political equality with their fellow men. It is a spirit that says that no race or class, I care not how wise or how virtuous it may be, has a right in this land to govern any other.

Remember the characteristics of this national mind—its marvelous energy growingly assisted by creative genius, charitable, hospitable, inexorable, yet strangely the ultimate truths in government, thought, and religion. May we not dare to look into the black face and the red face, yes, into the Orient yellow face itself, without blushing, and say: Being us a receptive attitude with the willing power of homogeneity, and not the dress and a courage of your life, and we will assimilate you by the energies and forces of the American mind, acting along the lines of local self-government, personal prosperity, an intelligent press, a universal school, and an elevating religion?

LETTERS

THE TONIC SOL-FA SYSTEM.—In an article on the National Education Association, in the SCHOOL JOURNAL of July 25, occurs the following sentence: "The Tonic Sol-Fa method should have a fair trial, and show by its fruits rather than by its assertions what it can do."

The first proposition is obvious. The second is also perfectly sound, but contains an implication that the advocates of the system are more ready to make assertions than to show fruits. This is the farthest possible from the truth. Their one often-repeated "assertion" is this: "Examine, test, and judge from the fruits." Statements of fact are not assertions. It should be remembered that the Tonic Sol-Fa system is no new thing. It is a growth of nearly half a century of experiment and experience. Hence, in urging the American teachers to adopt the method, it is necessary to state the reasons why it should be adopted. These statements cannot, in any proper sense, be regarded as mere assertions. They are history. I will give a few items of this history to show that all experience points inevitably to the Tonic Sol-Fa system as the future method of musical study:

1. The system was not made. It grew.
2. It grew in the face of determined opposition.
3. Although at first despised by the regular musical profession, it was afterwards recognized, endorsed, and adopted by them, as fast as they understood it.
4. It is practically the universal method in the schools of Great Britain.
5. It is opposed in America only by those who do not know, by practical experience, how soundly educational it is.

Statements like the above could be added almost indefinitely. But these are enough to convince any unprejudiced mind that a system with such a history cannot be lightly passed by. The only wish of the advocates of the method is that the teachers of America would give it a "fair trial." Hundreds have already done so, and are surprised and delighted with the results. They see that the system opens up the subject of music in a new and natural way.

All friends of education who happen to be in New York on any Monday during the school year, are cordially invited to visit Grammar School No. 45, at 225 West 24th Street, at 10:15 A. M. They can then see the system in operation, and judge it by its "fruits."

THEODORE F. SEWARD.

DRUNK OR DRANK.—A correspondent of the *Christian Union* asks: "To whom shall the public look for instruction in morals and religion, in good English and correct grammar, if not to you? And yet you have just said, in last issue, in big letters: 'Not all is drunk.' Worcester is it true, says that *drunk* is sometimes used as participle (he might have said it is so used every day); but this does not make it right." The answer given is worthy of record. It is an excellent example of sensible grammar. Authority is the standard; parsing has nothing to do with it. "If logic determines grammar, *drunk*, not *drank*, is the proper form; if good usage determines grammar, *drank*, not *drunk*, is the better form. Webster says: '*Drunk* was formerly used as the past participle of *drink*; as, 'he had drunk wine'; but in modern usage *drank* has to a great extent taken its place, and *drunk* is now used chiefly as an adjective.' He might have added that in ancient usage, also, *drank* was recognized as a legitimate form of the past participle. It is so used by Shakespeare. Thus either form is correct, while *drank* appears to us to be in better taste. On the other hand, however, Whitney gives *drunk* as the better form."

IN DEFENSE OF THE REGENTS.—I find that many of the criticisms of the Regents' examination questions made and published in the papers are based upon the examinations as they were many years ago, when they were but just begun. These are repeated and reiterated, and no credit given for the fact that improvement has been made, and is being made, in them. The board welcome criticism, for it is only through honest criticism that work can be improved; but such criticism should be based upon an intelligent notion of the present condition of the thing criticised. They are ready to work for the good of the schools in the state, and are working in that direction with all their might, daily.

Are you not making a mistake in advocating the placing the educational system of the state under one man, and he a man—judging the future by the past—likely to be a politician? Is not a board safer? Ought we not to work for a board now, rather than for a political head in one man? I know the question is an old one, but so long as the State Superintendent is elected by the Legislature, the office is likely, with very rare exceptions, to be filled by men not selected for their educational fitness. A. B. W.

TEACHING READING.—I have taught for nearly sixteen years, and most of the time in the primary department. In all the time that I have been a teacher, I have never taught the A B C's to any child. I have met considerable opposition from the parents at the first, but have proved that my way was the best by the results. I have never been able to find a primer or first-reader that introduced the words slow enough, nor that had one tenth of the reading that they ought to have for the number of words. I have put the lessons on the blackboard, and taught entirely without books until the children could read and spell about one hundred and fifty words. Then I would let them learn one lesson from their book to two from the board, containing the same new words. I always teach the first ten or twelve words in print, so that when the children go home, they can find the words that they have learned in books. Then I put the words on the board in print and script, having the children copy the writing on their slates. By the time they have learned twenty or thirty words, they will read the print or the script alone, although they only reproduce the script. Each new word given after this I place on the board in both script and print, then have the reading lesson in script. I do not teach the letters until after all the lessons on the cards are learned. A. O. K.

ANSWERS.

178. The Congo has the greater volume of water; but the St. Lawrence exceeds both by far in the volume of its water, in that its great lakes—simple expansions of the river—contain more than one-half of all the fresh water on the face of the globe. S. A. S.

181. The epidermis, or scarf-skin, is composed of layers of broad scales, the dead cells of the true skin, and hence is always dead. The derma, and, in fact, the whole body, is constantly dying, since the cells die, and are being constantly replaced, it is believed, in from sixty days (brain) to seven years. S. A. S.

290. The color of a body is its property of reflecting, or transmitting to the eye, light of that particular color, the other rays being absorbed. White reflects all the colors to the eye, and is therefore strictly no color, but a combination of all. Black reflects none to the eye, and is therefore not a color. Properly speaking, color is not a property of matter, but of light. A ribbon is called red, but the redness belongs to the light, not to the ribbon. G. E. M.

231. John Sherman is President of the Senate, and is therefore virtually Vice-President. G. E. M.

237. Cotopaxi, 18,887 feet in height. G. E. M.

238. (a) Yes, if there were not, none could reach us. The question is whether the eye could perceive it. (b) Take any convenient box, 2 ft. on each edge, and at each end a glass window about 4 inches square. Place it on a table in a darkened room, and with the heliostat (any piece of looking-glass will do) send a solar beam through the windows. Standing before the glass front of the box. This beam may be traced from the heliostat, through the box, and beyond it. Open the box, smear the inner surface of its top, back, and bottom with glycerine, and close the box, airtight. Allow it to remain quiet a few days; the dust in the box will be caught by the glycerine, and the confined air thus freed from particles capable of reflecting light. Then repeat the experiment with the heliostat, standing as before, the beam may be traced to the box and beyond it; but within the box all is darkness. This proves that rays of light that do not enter the eye are invisible. The beam in the box was visible because the floating dust reflected some of the light to the eye. The reflecting particles of dust being absent, the beam was invisible. So above the atmosphere we presume there are no particles of dust, or other substance to reflect light to the eye, hence, to us, there is no light beyond the atmosphere. (c) Four miles is the highest ever ascended, and from the experience of these men, it is supposed man can exist but little higher. G. E. M.

239. A bushel contains 2150.4 cu. in. To find the area of a circle, the diameter being given: Multiply the square of the diameter by .7854. Divide the area of circular cloth by number of cu. in. in a bushel; the result is the height. G. E. M.

241. Big trees of California—Charter oak. G. E. M.

246. Easter is always the Sunday after the 14th day of the calendar moon which occurs on, or the next after, the 21st day of March. It may be as early as the 22d day of March (as in 1818), or as late as the 25th of April (as at present, 1896). This will not again occur until 1943. The ecclesiastical year begins with March 21. At the time when the Gregorian calendar was introduced, deference to ancient custom led the ecclesiastical authorities to adhere to determine Easter by the moon. The 14th of calendar moon had, from the time of Moses, been considered as full moon; hence the Sunday after the 14th, or paschal full moon—first following the opening of the ecclesiastical year—was chosen, so that Easter should not occur at the time of the Jewish Pass-over. It did so occur, however—1805, April 14; 1895, April 2; and will, 1903, April 12. S. A. S.

248. The solar system does move, and has so vast an orbit that eighteen million of years must elapse before it has completed one revolution. G. E. M.

251. The mouth of the Mississippi river is about two feet farther from the center of the earth than is its source, but the water does not "run up hill." The water of the ocean is farther from the center of the earth, in the latitude of the Mississippi's mouth, than it is in the latitude of its source, the motion of the earth tending to force it towards the equator. F. H.

253. Put a white and a black cloth on snow; notice that the snow is melted under the black cloth, but very little under the white. This is because black absorbs heat, while white reflects. G. E. M.

254. Yes, he may; but where a Government employee receives a fixed salary, he is to give his full time to the duties of his office.

QUESTIONS.

979. In the sentence "He is so good, he is good for nothing," what does the subordinate proposition modify? C. E. B.

273. Grades, temperature, etc., being equal, should the McKenzie or the Mississippi river have the greater velocity? S. A. S.

274. Why does water gather in blisters? Why air? and when air or water? S. A. S.

275. How can bones grow in length and the joints not become "club-joints"? S. A. S.

276. Is there any such thing as cold? S. A. S.

277. Is sound an entity, i. e., is there such a thing as sound emanating from a bell, etc.? S. A. S.

278. When, how, and why do clothes freeze dry? S. A. S.

279. Why is snow white, and ice transparent? S. A. S.

280. Explain process by which snow is forced into balls. S. A. S.

341. Why does hair grow (sometimes) in the grave? S. A. S.

353. When was charcoal first used? R.

283. What are the mistakes, if any, in the following verses from Byron?

"Place me on Sunium's marble steep,
Where nothing, save the waves and I,
May hear our mutual murmurs sweep;
There, swan-like, let me live and die."

A. M.

284. Who wrote "Hail Columbia"? N. J. B.

BOOK DEPARTMENT.

NEW BOOKS.

THE STORY OF THE JEWS. By James K. Hosmer. New York and London: G. P. Putnam's Sons.

This is one of that interesting series, "The Story of the Nations," which has been doing so much thus far to familiarise young people with the most vital aspects of history. The author of the present book has had certain peculiar difficulties to contend with; as any one can see who will for a moment consider the significance of Jewish history in its relation to the prejudices, convictions, and religious sentiment on various sides, of most civilized people. But the author has acquitted himself well of the delicate task. He has given prominence to the more picturesque and dramatic features of the record. He has wisely presented at their face value, those situations and events which seem to involve profound controversy; leaving room for individual interpretation. Yet he has not by any means left the young reader to struggle among half-truths and incomplete pictures. He is here led to appreciate more deeply the strange and powerful influence of the Jew in history, and at the same time to understand more accurately his religious feelings and the motives which render the Hebrews an isolated race.

The book is educative in more than one sense; developing together the imagination and the judgment; and strengthening manly instincts, while it teaches historical truth. It is at once a history and a romance, and will be read with an eagerness proportionate to its merit.

FENNO'S FAVORITES, No. 3. One Hundred Choice Selections for Reading and Speaking, with Indicated Gestures, Explanatory Notes, etc.

FENNO'S FAVORITES, No. 4. Fifty Choice Dialogues for Speaking and Acting, with Definite Particulars as to Costumes, Scenes, Entries, etc. By Frank H. Fenno, A.M. Philadelphia: John E. Potter & Co. 12mo, paper. Price, 25 cents each.

These compilations by Prof. Fenno have long been favorites in fact as well as in name—and very deservedly so. And the series seems to grow, if possible, better and better. In No. 3, the selections are exceptionally excellent and fresh, containing a judicious variety of poetry and prose, humor and pathos, narrative and impersonation. Specially noteworthy features are the indicated gestures and explanatory notes, and a practical treatise on voice culture, covering seven pages, and worth alone far more than the cost of the volume.

No. 4 is something of a departure from the others of the series, being a collection of dialogues, instead of individual selections as in preceding numbers. The dialogues call for from two to a dozen characters, and vary from barlesque to tragedy. They are exactly adapted to the capacity of young amateurs, and in view of the difficulty found in providing suitable short dialogues for school or lodge entertainments, this book will be remarkably welcome. The selections are made with reference to originality and practical usefulness. In the preface are explicit directions as to stage business, costumes, the erection and management of the stage, curtain, lights, etc., all of which render the book particularly valuable. It will undoubtedly have a large sale.

THE INSUPPRESSIBLE BOOK. A CONTROVERSY BETWEEN HERBERT SPENCER AND FREDERICK HARRISON. With Comments by Gall Hamilton. Boston: S. E. Cassino & Co.

In this book the author gives his version of the controversy between Herbert Spencer and Frederick Harrison, in which he claims that the latter throughout, either ignorantly or willfully misrepresents the theories of Herbert Spencer. The writings of each are criticized, showing wherein Mr. Harrison has been at fault in his acceptance of Mr. Spencer's arguments. After treating religion and agnostic metaphysics as considered by both these men, the author comments upon the manner in which each regards the Gospel in its relation to the present advanced stage of science. He says that science as presented by Mr. Spencer agrees with the Bible. In the chapter *Causa Belli*, is given the correspondence which passed between these two gentlemen, both privately and in the daily papers, upon the American reprints of their writings. The controversy on the part of Mr. Harrison he characterizes throughout as acrimonious and malicious. The book is a very valuable treatise to all who wish to know Mr. Spencer's true theories as it is written by one who is in full accord with him.

BOOKS RECEIVED.

Studies in General History. By Mary D. Sheldon. Boston: D. C. Heath & Co. \$1.75.

A Lexicon of the First Three Books of Homer's *Iliad*. By Clarence E. Blake, A.M. New York: D. Appleton & Co.

The First Steps in Numbers. By G. A. Wentworth, A.M., and E. M. Reed. Boston: Ginn & Co. \$1.00.

A Grammar School Arithmetic. By G. A. Wentworth, A.M. Boston: Ginn & Co. 85c.

First Steps in Numbers: a Primary Arithmetic. By G. A. Wentworth, and E. M. Reed. Boston: Ginn & Co. 35c.

Elementary Political Economy. By A. B. Messervy, Ph.D. Boston: Thompson, Brown, & Co.

Ecclesiastical Institutions: being Part 6 of the Principles of Sociology. By Herbert Spencer. New York: D. Appleton & Co. \$1.25.

Tommy's First Speaker, for Little Girls and Boys. By Tommy Himseliff. Chicago: W. H. Harrison, Jr. 50c.

Twenty-five Years with the Insahe. By Daniel Putnam. Detroit: John MacFarlane.

The Dawning: A Novel. Boston: Lee & Shepard. \$1.50.

What We Really Know About Shakespeare. By Mrs. Caroline Henley Dall. Boston: Roberts Bros. \$1.25.

McClellan's Last Service to the Republic, together with a Tribute to his Memory. By George Ticknor Curtis. New York: D. Appleton & Co. 30c.

Plato, Apology of Socrates, and Crito. By Louis Dyer. Boston: Ginn & Co. \$1.00.

Euripides Bacchantes. By I. T. Beckwith. Boston: Ginn & Co. 22c.

Introduction to the Language and Verse of Homer. By Thos. D. Seymour. Boston: Ginn & Co. 50c.

Five-Minute Recitations. By Walter K. Forbes. Boston: Lee & Shepard. 50c.

Outlines of Universal History. By Geo. Park Fisher, D.D., LL.D. New York: Ivison, Blakeman, Taylor & Co. \$3.00.

Easy Lessons in German: an introduction to The Cumulative Method. By Adolphe Dreyspring. New York: D. Appleton & Co.

Donovan, a Modern Englishman: A Novel. By Edna Lyall. New York: D. Appleton & Co. \$1.50.

English Worthies. Edited by Andrew Lang. Marlborough. By Geo. Saintsbury. New York: D. Appleton & Co. 75c.

Strange Case of Dr. Jekyll and Mr. Hyde. By Robert Louis Stevenson. New York: Chas. Scribner's Sons.

The Story of the Jews. By James K. Hosmer. New York: G. P. Putnam's Sons.

The Talisman. By Sir Walter Scott. Edited by Dwight Holbrook. Boston: Ginn & Co. 60c.

The Broken Shaft: Tales in Mid-Ocean. Edited by Henry Norman. New York: D. Appleton & Co. 25c.

A Child's Version of Aesop's Fables, with a supplement containing fables from La Fontaine and Kriof. J. H. Stickney. Boston: Ginn & Co. 40c.

The New Third Music Reader. By Luther Whiting Mason. Boston: Ginn & Co. 35c.

True Stories from New England History, 1620-1803. By Nathaniel Hawthorne. Grandfather's Chair; complete in three parts, with questions. Boston: Houghton, Mifflin, & Co. 45c.

The King of the Golden River; or, The Black Brothers. A Legend of Stria. By John Ruskin, M.A. Illustrated. Boston: Ginn & Co. 50c.

Fenno's Favorites, No. 3. One hundred Choice Pieces for Reading and Speaking. No. 4, 50 Choice Dialogues for Speaking and Acting. By Frank H. Fenno, A.M., F.S., Sc. Philadelphia: John E. Potter & Co. 25c. each.

The Humbler Poets. A collection of newspaper and periodical verse. By Slason Thompson. Chicago: Jansen, McClurg, & Co. \$2.00.

Euripides Bacchantes. Edited on the basis of Wecklein's edition. By I. T. Beckwith. Boston: Ginn & Co. \$1.15.

Hints on Language, in connection with Sight-Reading and Writing in Primary and Intermediate Schools. By S. Arthur Bent, A.M. Boston: Lee & Shepard.

Essential Lessons in English Composition, Analysis, and Grammar. By J. E. Murray. Philadelphia: John E. Potter & Co. 75c.

January: Through the year with the Poets. Edited by Oscar Fay Adams. Boston: D. Lothrop & Co. 75c.

Greek Inflection; or, Oject-Lessons in Greek Philology. By B. F. Harding, M.A. Boston: Ginn & Co. 55c.

The Leading Facts of English History. By D. H. Montgomery. Boston: Ginn & Co. \$1.12.

Byron's Child Harold. Edited with introduction and notes by H. F. Tozer, M.A. Oxford: At the Clarendon Press. 90c.

Letters to a Daughter, and "A Little Sermon to School Girls." By Helen Ekin Starrett. Chicago: Jansen, McClurg, & Co. Cloth, 75c. Paper, 50c.

French Dishes for American Tables. By Pierre Caron. New York: D. Appleton & Co. \$1.00.

Social Studies in England. By Sarah K. Bolton. Boston: D. Lothrop & Co. \$1.00.

Jacob Schuyler's Millions. A Novel. New York: D. Appleton & Co. 50c.

The Correspondent. By James Wood Davidson, M.A. New York: D. Appleton & Co. 60c.

LITERARY NOTES.

Mr. Slason Thompson has edited, and Messrs. Jansen, McClurg & Co. have published, in a handsome library form, "The Humbler Poets," a Collection of Newspaper and Periodical Verse, 1870 to 1885.

Alphonse Daudet intends to write a history of Napoleon I.

The *Athenaeum* contradicts the report that "Mr. Browning's purchase of a palazzo in Venice was prompted by the desire to place the greatest possible distance between himself and the Browning Society." It has really been bought for the convenience of Mr. R. B. Browning.

The present list of publications issued or reprinted for the United States under the auspices of Houghton, Mifflin, & Co., of Boston, are the "Andover Review," "The Edinburgh Review," "The Quarterly Review," "The Reporter" (legal); and the familiar "Atlantic Monthly;" the latter now drawing near to its thirtieth year.

The English critics seem to deal very hardly with Mr. Robert Buchanan in his new poem, "The Earthquake; or, Six Days and a Sabbath." They say he possesses genius, but not the power of attraction.

Scribner & Welford have ready a second edition of Lord Lindsay's "Sketches of the History of Christian Art," in two volumes, which is exactly like the first, his widow preferring to leave the work as her husband left it rather than have it revised by another hand.

Since the death of Mr. J. B. Lippincott, on Jan. 5, his sons Walter and Craig are at the head of the Lippincott Publishing Company. The catalogue of this house numbers some 3,000 books, of which many are standard works of great value.

Mr. Ruskin hoped to get the remaining three chapters of "Pretoria," which will complete the first volume of his Autobiography, finished and out by his birthday on Feb. 8. Messrs. John Wiley & Sons are his publishers.

D. C. Heath & Co., of Boston, published in January, "The Temperance Teachings of Science," by Prof. A. B. Palmer, of the University of Michigan. It is intended for teachers and pupils in the public schools, and is strongly endorsed by those interested in the cause.

In England last year 4,307 new books were published. Of these the largest number of any one kind—636 volumes—were religious. There were also brought out 1,333 new editions. The second-hand booksellers suffered very much during the year from poor trade. The demand from America fell off greatly. One London firm, which in '84 supplied us with \$10,000 worth of books, in '85 sent over only \$2,500 worth.

"Two Strokes of the Bell" is the title of a novel by Mr. Charles H. Montague, which is to appear in a few days. Those who have read the advanced sheets, pronounce the work to be strikingly original, and one that is likely to attract much attention.

"French Dishes for American Tables" is the latest contribution to the gastronomic lore of the day. The recipes, of which there are over 600, have been prepared for eight persons. It is published by D. Appleton & Co.

Messrs. Harper & B. others have just issued a new edition of Mr. Crox's "Life of George Eliot," containing important information of her change of religious belief in 1841-42. The next issue of this Handy Series will be a volume of stories by Alphonse Daudet, translated by Miss S. L. Lee; and they have in the press a new historical work on the Indians, entitled "The Massacres of the Mountains." The author is Mr. J. P. Dunn, Jr., of Indianapolis, who has devoted much time and labor to the subject.

A single copy of the first edition of "Pickwick" was sold in London recently for \$140.

Messrs. Houghton, Mifflin, & Co. have nearly ready a new edition of Macaulay, and judging from the number of volumes of which it is to consist, sixteen, we suppose it will be a complete one.

James A. Froude is preparing a new book, which will treat of the expansion of England and imperial federation.

The first volume of the posthumous works of Victor Hugo will be issued by his executors next month. It will bear the title "Le Theatre en Liberte," and will contain a number of dramas in verse.

Dr. Oliver Wendell Holmes says he receives such cheerful letters as the following:

"Dear Sir: 'Please send me your autograph. As you will not be writing autographs much longer, please attend to it at once.'"

A fac simile of Shakespeare's will has been prepared by Messrs. Cassell & Co. for issue with Part I. of their Quarto Illustrated Shakespeare.

Messrs. Macmillan & Co. have just issued a volume by Prof. Blackie, which will be of much interest to teachers. Its title is, "What Does History Teach?"

Mr. Flea is writing "The True History of the Life and Death of William Shakespeare, Player, Poet, and Play-maker." The book—which will be embellished with three etchings—will be published in March.

A compilation of the best poems written by English and Scotch women during the last two hundred years is to be brought out in London in the spring. It will be entitled "Women's Voices."

The National Woman's Christian Temperance Union has issued through its superintendent, Frances E. Willard, a plan of work for 1886, urging upon the local unions the necessity for concerted work; the circulation of leaflets concerning temperance; the calling of mother's meetings for the purpose of diffusing a knowledge in training to sons and daughters for pure, moral, and virtuous lives; the holding of meetings to be addressed by clergymen, editors, teachers, and physicians, and the organization of more unions. This plan, if earnestly followed, is bound to succeed in accomplishing the desired results.

Here are a few among many commendatory letters received regarding our new edition of "Tate's Philosophy of Education:"

"For more than 20 years it has been our text-book in this subject, and I know of no other book so good for the purpose. The edition you have issued is neatly put up, and very convenient for use in schools."—E. A. SHELDON, Pres. State Normal and Training School, Oswego, N. Y.

"I am pleased with it. The editor appears to have done his work conscientiously and intelligently."—JAS. H. HOOKER, Pres. State Normal and Training School, Cortland, N. Y.

"* * * 'The excellent edition of 'Tate's Philosophy of Education,' which you are publishing. The book is a classic on education, and will never grow old. The notes in your edition are very excellent, and add greatly to the value of the book.'"—THOS. M. BAILLIET, Supt. of Schools, Reading, Pa.

"As a work on education, 'Tate's Philosophy of Education' needs no indorsement of mine. As a pointed and judicious statement of educational principles, it has no superior, so far as I know. As a book of reference in the work of our training class, I place it along with Payne's and Fitch's. The work of the editor seems to be well done, and your part—type, paper, presswork, and binding—is most creditable."—S. A. ELLIS, Supt. of Schools, Rochester, N. Y.

Messrs. Jansen, McClurg, & Co. have recently issued an American edition of Mr. George Saintsbury's "Specimens of English Prose Style." They also publish "Letters to a Daughter," by Mrs. Helen E. Starrett.

The February number of the *Book-Dayer* commences its third volume. It has already during its short life acquired a reputation surpassing most of the older publications for the same purpose. It has become indispensable to literary people and others wishing to keep informed about the books of the day, and is filled with fresh and racy literary news. Especially to teachers and students whose means are limited, it is an invaluable assistant in selecting the books they desire. The present number begins a new department, illustrations being sprinkled through the pages, and a particularly pleasing feature is the portrait of a distinguished author which constitutes the frontispiece of each number. In this instance it is Mrs. Burnett. Specimen copies of the magazine can be secured by addressing the publishers, Charles Scribner's Sons, 743 Broadway, N. Y.

NEW BOOKS.

BONNYBOROUGH. By Mrs. A. D. T. Whitney. Boston and New York: Houghton, Mifflin & Co. Price, \$1.50.

It is hard to characterize this work of Mrs. Whitney's in any more explicit fashion than by simply declaring it unequivocally her own; strongly marked throughout with her peculiar individuality accentuated on nearly every page, both by her shining virtues and her worst faults. It is undeniable that her style is seriously faulty, and in places almost intolerable to a mature mind. Neither can one be blind to her brilliancy and facile wit.

The present story, to state the case rather boldly, is a love tale concerning three couples, around whose more or less smoothly-running course is woven a tissue of religious sentiment, and that tediously minute introspective moralizing that appeals so sympathetically to young and sensitive natures, and has won for the author a place very near the heart of the rising generation, whose thoughts are so largely directed inward in an intense, morbid self-scrutiny. But after all has been said, the work is eminently readable, and conveys lessons of charity and womanliness that are well-timed and forcible.

THE MOTHER'S MANUAL OF CHILDREN'S DISEASES. By Charles West, M.D. New York: D. Appleton & Co. Price, \$1.25.

The manual gives in a small compass, avoiding all detail, a description of the diseases of early life—such as may help a mother to understand something of their nature and symptoms, to save her from needless anxiety as to their results, and to intelligently aid the doctor in his treatment. It speaks of the diseases in the child from the time of its birth onward, reviews the several causes which lead to mortality—the general symptoms as shown by the cry and the action of the child; the disorders of the brain and nervous system, chest, digestive organs, and of the constitution generally. There is an index added which will be found very handy for reference.

It is not intended as a nursery handbook, but is an exhaustive treatise by a practicing physician of wide experience and reputation. Such a book, if carefully consulted by mothers, would do much to save expense and often unnecessary suffering.

A HANDBOOK OF THE NATIONAL MUSEUM AT THE SMITHSONIAN INSTITUTION, WASHINGTON. New York, Chicago, and Washington: Brentano Bros.

The history of the organization and development of the National Museum, and a description of the exhibits, are given in this little book. It contains many full-page views of different departments in the museum, and smaller cuts illustrating the contents.

In systematic order the reader is taken through the different departments as though he were really a visitor at the museum. The book is divided into the two departments of organic and inorganic world; and in these, after considering the whole, the author proceeds in an analytical manner to describe the component parts. Thus under the organic world is described such specimens of botanical and zoological life as are on exhibition; and archaeology, ethnology, and comparative technology are treated respectively as subordinates to anthropology. Besides being an excellent guide to the museum, it is also an entertaining and instructive treatise, worthy of careful examination and study. It is well printed, and neatly bound in pamphlet form.

NEW YORK AND THE CONSCRIPTION OF 1863. A Chapter in the History of the Civil War. By James B. Fry. New York: G. P. Putnam's Sons.

It has been a much debated question, how large a quota of conscripted men were supplied to the army of the North, during the civil war, by the State of New York, and an explanation is here undertaken. Everyone acquainted with the history of our late war knows of the riot in the city of New York which followed the first attempt at conscription. The course pursued by Governor Seymour on that occasion has been criticised by many persons, both friendly and unfriendly to him, who did not know the motives which prompted his action. This

book gives the correspondence which passed between him and the Secretary of War, and will do much to remove many prejudices against Governor Seymour. There is annexed an appendix which greatly adds to the interest of the book.

FIVE-MINUTE RECITATIONS. Selected and Adopted by Water K. Fobes. Boston: Lee & Shepard. Price, 50 cents.

The demands of students in schools and colleges, where recitations are now limited usually to five minutes' duration, have been considered in the preparation of this volume. It has been compiled by a practical public elocutionist and tutor. Many of the excellent but long selections have been abridged or re-written. The contents embrace selections from Shakespeare, Macaulay, Spencer, Mrs. Hemans, Tennyson, Schiller, Dickens, Scott, Carleton, Moore, Knowles, and others, whose writings are among the best in our language, and have a world-wide reputation. On looking over the book, we find there many which, in delivery, have often made the heart thrill and held the mind enrapt. It is neatly and well printed, and excellently bound.

THE LEADING FACTS OF ENGLISH HISTORY. By D. H. Montgomery. Boston: Ginn & Co. Price, \$1.12.

Here we have presented the story of England in a concise and clear, yet continuous and attractive narrative. The material presented is to history what substance is to chemistry, or the living plant to botany, and, while it is comprehensive, it also stimulates to further observation, study, and insight. The plan has excluded many minor details which would obscure rather than bring into prominence the primary facts of history.

The narrative is introduced by a review of the genealogical descent of the English sovereigns from the time of Egbert, in 802, to the present, and a chronological summary of the principal events of English history, giving also the authorities to be consulted for more minute details than are presented here. The narrative begins with a glance at prehistoric Britain, and a discourse on the relation of its geography to its history. It commences the historic review with the landing of Caesar, previous to which, the author claims, we can have no authentic knowledge. He then proceeds to trace the historic development by periods, through the Roman, Anglo-Saxon, Norman, Norman-Saxon, the Stuart, and the present; and he ends by giving a compact outline of the constitutional and political history. There are several appendices added, which give the geographical, financial, and politico-economic statistics, and indices of the principal events and acts of parliament, etc. The frontispiece is an accurate map of modern England.

The plan, style, and handling of the material will recommend the work to all who desire a readable cyclopaedia of the main topics of English history. It is well printed on good paper, and neatly bound in cloth.

STRANGE CASE OF DR. JEKYLL AND MR. HYDE. By Robert Louis Stevenson. New York: Charles Scribner's Sons. Price, \$1.00.

So much has been said lately about the merit of Mr. Stevenson's literary style, that one unfamiliar with it comes to this book with some curiosity. This finds agreeable satisfaction in the smooth, clear-cut, easy, expressive sentences; and one forgets immediately to be critical—being enlisted in the story almost at the start. It is indeed a good story, uncommonly well told, and a second reading reveals a remarkably artistic handling of the plot, together with many fine touches that do not appear until one has the key of the mystery. If the foundation idea of the story is not entirely original, certainly the treatment is quite so, and developed with a cumulative power that bears the reader on, swifter and swifter, to the thrilling climax. It would spoil the interest of the prospective reader to do more than hint at the plot; it is sufficient to say it will fascinate and chain him in reading, and live with him long afterward.

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Dr. W. H. HOLCOMBE, New Orleans, La., says: "I found it an admirable remedy for debilitated state of the system, produced by the wear and tear of the nervous energies."

THIRTY-FOURTH ANNUAL REPORT.

The Massachusetts Mutual Life Insurance Co.,

For the Year Ending December 31, 1885.

RECEIPTS IN 1885.

| | |
|---------------------|----------------|
| Premiums, | \$1,216,695 07 |
| Interest and Rents, | 412,272 47 |
| Total, | \$1,628,968 14 |

DISBURSEMENTS.

| | |
|--------------------------------------------------------------|----------------|
| Death Claims, | \$387,408 00 |
| Matured Endowments, | 111,612 00 |
| Surplus returned to Policy-holders in Dividends, | 221,929 01 |
| Surrendered and Canceled Policies, | 100,734 24 |
| Total payments to Policy-holders, | \$821,673 25 |
| Commissions and Salaries, | 238,874 88 |
| Other Expenses, | 69,570 16 |
| Taxes, Licenses and other State Fees, | 41,950 63 |
| Re-insurance, | 15,175 86 |
| Expenses on Real Estate, | 40,849 87 |
| Profit and Loss, including premiums on securities purchased, | 126,389 01 |
| Total Disbursements, | \$1,358,883 06 |

ASSETS.

| | |
|-------------------------------------------------------------|----------------|
| First Mortgage Loans on Real Estate, | \$1,638,278 34 |
| Loans Secured by Collaterals, | 579,884 00 |
| Loans on Company's Policies in force, | 190,444 35 |
| United States Bonds, | 112,750 00 |
| City, County, Township, and other Bonds, | 519,837 00 |
| Gas and Water Bonds, | 658,205 00 |
| National Bank Stocks, | 106,987 00 |
| Railroad Bonds, | 998,870 00 |
| Railroad and other Stocks, | 796,988 00 |
| Real Estate, | 1,431,065 47 |
| Premium Notes on Policies in force, | 535,707 87 |
| Bills Receivable, | 5,263 88 |
| Cash on hand and in Bank, | 192,803 07 |
| Interest and Rents accrued, | 129,429 64 |
| Premiums in course of collection (less cost of collection), | 70,179 16 |
| Deferred Premiums (less cost of collection), | 141,961 44 |
| Total Assets, | \$8,108,754 22 |

LIABILITIES.

| | |
|-------------------------------------------------------------------|----------------|
| Reserve by Massachusetts Standard, | \$7,870,942 00 |
| Death Claims not adjusted and not due, | 69,470 00 |
| Endowment Claims not adjusted and not due, | 4,641 00 |
| Unpaid Dividends, | 23,834 89 |
| Premiums paid in advance, | 4,596 42 |
| Interest paid in advance, | 2,645 00 |
| Total Liabilities, | \$7,476,119 31 |
| Surplus by Massachusetts Standard, | \$632,634 91 |
| Surplus by New York Standard (about), | 1,185,000 00 |
| Number of Policies issued in 1885, 2,598, insuring, | 8,029,520 00 |
| Number of Policies in force, December 31, 1885, 15,631, insuring, | 37,965,158 00 |

Springfield, Mass., Jan. 23, 1886.

The undersigned have carefully examined the cash, securities, and accounts of The Massachusetts Mutual Life Insurance Company, and find the same to agree with the above statement.

J. R. REDFIELD, } Auditors.
H. S. HYDE, }

M. V. B. EDGERLY, PRESIDENT.

HENRY S. LEE, VICE-PRESIDENT.

OSCAR B. IRELAND, ACTUARY.

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Congestion of the Kidneys, Back Ache.

Inflammation of the Kidneys, Bladder or Urinary organs.

Catarrh of the Bladder, Gravel, Stone, Dropsy, Enlarged Prostate Gland, Impotency or General Debility.

Bright's Disease.

WHY? Because it is the *only remedy known that has the power to expel the uric acid and urea*, of which there are some 500 grains secreted each day as the result of muscular action, and sufficient if retained in the blood, to *kill six men*. It is the direct cause of all the above diseases, as well of Heart Disease, Rheumatism, Apoplexy, Paralysis, Insanity, and Death.

This great specific relieves the kidneys of too much blood, frees them from all irritants, restores them to healthy action by its certain and soothing power.

IT CURES ALSO Jaundice, Enlargement of the Liver, Abscess and Catarrh of the Bile Ducts, Biliousness, Headache, Furred Tongue, Sleeplessness, Lanquor, Debility, Constipation, Gall Stones, and every unpleasant symptom which results from liver complaint.

WHY? Because it has a *specific and positive action* on the liver as well as on the kidneys, increasing the secretion and flow of bile, regulates its elaborating function, removes unhealthy formations, and, in a word, restores it to natural activity, without which health is an impossibility.

IT CURES ALSO Female Complaints, Leucorrhoea, Displacements, Enlargements, Ulcerations, Painful Menstruation, makes Pregnancy safe, prevents Convulsions and Child-Bed Fever, and aids nature by restoring functional activity.

WHY? All these troubles, as is well known by every physician of education, arise from *congestion* and impaired kidney action, causing stagnation of the blood vessels and breaking down, and this is the beginning and the direct cause of all the ailments from which women suffer, and must as surely follow, an night does the day.

WHY Warner's Safe Cure is acknowledged by thousands of our best medical men to be the *only true blood purifier*, is because it acts upon scientific principles, striking at the very root of the disorder by its action on the kidneys and liver. *For, if these organs were kept in health all the morbid waste matter so deadly poisonous if retained in the body, is passed out.* On the contrary, if they are deranged, the acids are taken up by the blood, decomposing it and carrying death to the most remote part of the body.

WHY 93 per cent. of all diseases which afflict humanity, arise from impaired kidneys, is shown by medical authorities. Warner's Safe Cure, by its *direct action*, positively restores them to health and full working capacity, *nature curing all the above diseases herself when the cause is removed*, and we guarantee that Warner's Safe Cure is a positive preventive, if taken in time.

As you value your health take it to *avoid sickness*, as it will at all times and under all circumstances keep all the vital functions up to par.

We also *Guarantee a Cure* and beneficial effect for each of the foregoing diseases, also that every case of Liver and Kidney trouble can be cured where degeneration has not taken place, and even then Benefit will Surely be Derived. In every instance it has established its claim.

AS A BLOOD PURIFIER, particularly in the Spring, it is unequalled, for you cannot have pure blood when the kidneys or liver are out of order.

Look to your condition at once. Do not postpone treatment for a day nor an hour. *The doctors cannot compare records with you.* Give yourself thorough constitutional treatment with Warner's Safe Cure, and there are yet many years of life and health assured you!

THE PUBLISHERS' DESK.

Messrs. W. T. Pratt & Co., for many years one of the leading stationers in this city, have sold out their interest in the business to Messrs. Anderson & Krum. The firm was obliged to relinquish this department, their importation and manufacture of fine fancy goods having extended so largely during the past years as to require almost their entire attention. Mr. Pratt is also associated with Andrews & Co., general school furnishers, the latter business being the largest of the kind in the world.

Messrs. Anderson & Krum are well known to the book-trade, the former having had extended connection in the school-book business, and Mr. Krum has been for years the manager of Pratt & Co.'s stationery department. The new firm have leased the store No. 7 Bond street, and will in a few days be ready to attend to the wants of their friends and customers.

College trustees, school boards, and the heads of families who are looking for professors, principals, assistants, teachers, or governesses, as the case may be, will thank us for calling their attention to the American and Foreign Teachers' Agency, of Mrs. M. J. Young-Fulton, 28 Union Square, New York. This agency is in constant communication with all of these classes of individuals, and is able to find the right man for the right place, as well as the right individual for the right man. This latter individual is sure to be comfortably installed where he belongs, if he only makes himself known through this efficient and enterprising agency. We are moved to say to the teacher in search of a position, Don't be a slow-coach. If you want a place worthy of your abilities, don't start out on foot to find one. Some one will be there ahead of you every time. It will be the enterprising teacher who is in communication with a live and reliable agency.

Many teachers are constantly employed during their leisure moments in some sort of work, which they regard as a pastime, sewing, embroidering, etc., and many objects of use and ornament are result. We believe there is no class of people more industrious than the teachers, nor any in which, as a whole, the aesthetic faculty is more fully developed. With this in view, we commend them to the headquarters for ladies' fancy work, conducted by J. F. Ingalls, at Lynn, Mass., of which an advertisement appears in another column of the JOURNAL.

An ingenious little contrivance, destined to save many dollars to thrifty housekeepers and ladies who have leisure time on their hands, is manufactured by Messrs. E. Ross & Co., of Toledo, O. It is called the Novelty Rug Machine, and is used for making rugs, tidies, hoods, mittens, etc. Although it has recently been introduced into the market, it has already had an immense sale among the ladies, who are glad to know what they can do to busy themselves in useful ways after some of the harder work of the day is over. The makers are also manufacturers of stamped rug patterns on burlap, and dealers in yarns, etc. We advise our teachers to correspond with this firm.

We are personally acquainted with the Bridge Teachers' Agency of Boston, and teachers who desire the services of a reliable bureau will find their interests well and promptly taken care of, if intrusted to this agency.

On another page will be found the annual statement of the Massachusetts Mutual Life Insurance Co. Our readers should take the trouble to examine it, for it certainly makes one of the best showings as one of the most reliable and safe companies in the country. We not only recommend the company, but have for many years been insured in it. Those desiring to act as agents for an insurance company will do well to communicate with the secretary of the company, before engaging in any other agency.

The American Investment Company of Emmetsburgh, Iowa, has been organized by the officers of the First National Bank of that city, with a capital stock of \$1,000,000, to take the mortgage, loan, and real estate business of Ormsby Bros. & Co., a very old and well-known house in that line. Their advertisement of attractive investments will be found in another column. Col. Ormsby, the president of the company, has opened a New York office

at 150 Nassau st. In corresponding, please mention the SCHOOL JOURNAL.

Few books have met with such decided success as Allen's Forty Lessons in Book-keeping. It is written so clearly and concisely that any teacher can read and understand it. It is no matter of surprise to us that the first edition has in a short time been exhausted, and the second edition so soon in press.

Mr. H. E. Holt, instructor of music in the public schools of Boston, has prepared a most valuable Drill-Chart and Modulator, presenting the major scale in nine keys on the staff, with a diagram of scale ladder. It is printed on heavy manilla paper, 32x45 inches, and mounted on rollers, in map form, convenient for class use. No teacher of music in our country has had greater success in teaching music than Mr. Holt. His skill comes from the methods he uses. They are thoroughly scientific, yet so simple that any ordinary teacher can understand their meaning, and easily apply the principles. No teacher can afford to be unacquainted with what he has done for the teachers of singing. See the advertisement of Mr. Silver in another column, and write him for particulars.

IMPORTANT.

When you visit or leave New York City, save Baggage Expressage and \$5 Carriage Hire, and stop at the Grand Union Hotel, opposite Grand Central Depot. 600 Elegant rooms fitted up at a cost of one million dollars, at \$1 and upwards per day. European Plan. Elevator. Restaurant supplied with the best. Horse cars, stages and elevated railroad to all depots. Families can live better for less money at the Grand Union Hotel than at any other first-class hotel in the city.

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OUR PRICES BELOW ALL COMPETITION.

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OUR ENTIRE STOCK AT LOWER PRICES THAN EVER BEFORE KNOWN.

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February, 1886.

We offer for sale during this month over five thousand pieces of Reliable Black Silks of best quality at specially low prices.

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SPECIAL OFFERS:—We will send you our 13-c Stamp Work Book (new 1886 edition), for 3 two-cent stamps. Our new 10c book, *How to use Fancy Work* and *How to use the* A. Felt Tidy and Imported Silk to work it, for 5c. A FRIGIDIAN Tidy and Imported Silk to work it, for 25c. *Florence "Wists" Embroidery* 25c per package. EVERYTHING in this advertisement for 5c two-cent stamps (Illustrated) Circulars free. Address, J. F. INGALLS, S. Lynn, Mass.

NOVELTY RUG MACHINE.

(Pat. Dec. 27, 1881.) For making Rugs, Ties, Hoods, Mittens, etc. Sent by mail, full directions. Price \$1. Address: WANTED. Stamped Rug Patterns on Burlap and dealers in Yarns. Address E. ROSS & CO., Toledo, O.

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TOKOLOGY Complete LADIES GUIDE. The very best book for AGENTS. Sample pages free. Cloth, \$1.00; Morocco, \$2.00. HARTLEY PUBL. CO., Chicago.

AYER'S PILLS.

AYER'S act directly on the digestive **APILLS** organs, promoting a healthful action, imparting strength, and eradicating disease. These Pills contain no mercury, or other dangerous drug. **For the past two years I was troubled, constantly, with pain in the side and back. My stomach was also in a disordered condition. After taking many remedies, without relief, I tried Ayer's Pills, by the use of which, for only a few weeks, I was cured. — T. T. Sampson, Winona, Minn.

AYER'S are far superior, as a cathartic, to any that are furnished by the pharmacopoeia. — Geo. P. Spencer, M. D., Unity, N. H. **I have taken Ayer's Pills for twenty years, and am satisfied that, had it not been for them, I should not now be alive. By their use I have been enabled to avoid the bilious diseases peculiar to this climate. — M. Johnson, Monterey, Mexico.

AYER'S have been used in my family **APILLS** for over thirty years. We find them an excellent medicine in fevers, eruptive diseases, and all bilious troubles, and seldom call a physician. They are almost the only pills used in our neighborhood, and never fail to give perfect satisfaction. — Redmond C. Conly, Row Landing, W. Feliciana Parish, La.

AYER'S PILLS.

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists.

AYER'S are sugar-coated, safe and **APILLS** pleasant to take, prompt in their action, and invaluable for the relief and cure of Headache and Constipation.

**For several months I suffered from Headache, without being able to remove the trouble by medical treatment. I finally began taking Ayer's Pills, determined to give them a fair trial. They benefited me very much, and speedily effected a complete cure. — Mrs. Mary Guymond, Flint Village, Fall River, Mass.

AYER'S cured me of Dyspepsia after **APILLS** I had given up all hope of being well again. I was sick for a number of years with the complaint, suffering also from Headache, Dizziness, Loss of Appetite, Indigestion, and Debility, and was unable to work. Ayer's Pills were recommended to me. I took them, and, in one month, was completely cured. — Roland L. Larkin, Marlboro, N. Y.

AYER'S are a sure cure for Liver **APILLS** Complaint. For months I suffered from this disorder, and was, for a long time, under medical treatment for it, but grew worse continually. Nothing seemed to help me until I finally began taking Ayer's Pills. After using four boxes of this medicine, my health was restored. — E. L. Fulton, Hamover, N. H.

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